

DOCUMENT RESUME

ED 119 002

95

CE 006 588

AUTHOR Hansen, L. Sunny; And Others
TITLE Project TECE: Teacher Education for Career Education:
Module I: Orienting Prospective Teachers to Career
Education.
INSTITUTION Minnesota Univ., Minneapolis. Coll. of Education.
SPONS AGENCY Minnesota State Dept. of Education, St. Paul. Pupil
Personnel Services Section.; Office of Education
(DHEW), Washington, D.C.
BUREAU NO 5-EPDA-72
PUB DATE 75
GRANT OEG-0-70-1983(725)
NOTE 111p.; Reprint of Sept. 1973

EDRS PRICE MF-\$0.83 HC-\$6.01 Plus Postage
DESCRIPTORS Behavioral Objectives; *Career Education; Educational
Objectives; *Educational Theories; *Instructional
Materials; Learning Activities; Models; *Resource
Guides; State of the Art Reviews; *Teacher
Education
IDENTIFIERS *Project TECE

ABSTRACT

Module One, Orienting Prospective Teachers to Career Education, is one of three teacher educator modules developed by Project TECE of Minnesota University. The module is intended to serve as a resource handbook for the teacher educator, and provides background on the need for career education, a brief historical overview of the movement, and a current state of the arts review. A description of 10 dimensions which comprise career education objectives is given and a rationale for the selection and placement of vocational development tasks are presented by educational level: K-3, 4-6, 7-9, 10-12. The rationale is supplemented by an outlined presentation of career development program which specifies the behaviors which characterize each vocational development task. A bibliography of references (10 pages) is presented. Appendixes contain supplementary material on career education program development which might serve as handouts for the preservice student, a listing of selected career education models and their investigators or authors, and a partial listing of resource persons in Minnesota.
(LH)

* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *

PROJECT
TECE

TEACHER EDUCATION

FOR

CAREER EDUCATION

ED119002

MODULE I: ORIENTING PROSPECTIVE TEACHERS
TO CAREER EDUCATION

L. Sunny Hansen

Mary K. Klaurens

W. Wesley Tennyson

College of Education
University of Minnesota
Minneapolis, Minnesota

September, 1973

Reprinted with funds made available
under Title III of the Elementary
and Secondary Education Act of 1965

Pupil Personnel Services Section
Minnesota Department of Education
St. Paul
1975

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

ACKNOWLEDGEMENTS

A number of Persons have contributed to the development of these teacher education modules for career education. We would especially like to acknowledge the members of our University of Minnesota Career Development Curriculum Team who gave of their time and creative ideas: Professors Frank Ryan and Richard Kimpston for their perspectives and devil's advocate challenges as teacher educators; to Becky Timm and Michael Wollman, graduate students in counseling psychology, who served as catalysts; to Donald Kohns, distributive education instructor at Moorhead State College, for his down-to-earth suggestions; to Suzanne Laurich, elementary teacher in Roseville, for her reactions; to Mary Bee Antholz, Appalachia Regional Educational Laboratory, for her significant contributions to the section on the career development concept and rationale; and to numerous unnamed creative educators working to integrate career education into their classrooms and school systems from whom many ideas have emanated. While much of the material in these modules is original, some of the illustrative lessons were borrowed or adapted from other sources, all of which are acknowledged. We are also grateful to the Minnesota Department of Education for the grant which supported our developmental work in this area and to the College of Education Task Force on Career Education for its support of Project TECE.

F. W.

L. S. H.

M. K. K.

W. W. T.

CONTENTS

	PAGE
ACKNOWLEDGMENTS	11
SECTION	
I. INTRODUCTION	1
Needs of Youth	2
Emergence of Career Education Programs	3
Teacher Education Programs	5
Teacher Education Modules--Organization and Content	10
II. COMPONENTS OF TEACHER PREPARATION PROGRAMS IN CAREER EDUCATION.	13
The Need	14
The Career Education Concept	14
Orientation to the World of Work	15
Information Systems and Use of Resources	15
Implementation through Curriculum	16
Guidance and Counseling	17
Change Process	17
III. CAREER DILEMMAS AND SOCIAL ISSUES	19
Changing Meanings of Work	19
Changes in the Structure and Composition of the Labor Force	20
Problems Associated with Institutional Dropouts	21
The Walling-Off Dilemma	21
The Information Deficit Dilemma	22
Special Needs of Bypassed Populations	23
The Case for Career Education	24
IV. CAREER DEVELOPMENT: A BASIS FOR CAREER EDUCATION	26
Why Career Education?	26
Historical Perspective	28
Theoretical Underpinnings--Career Development Principles	30
V. THE CAREER DEVELOPMENT PROGRAM: A CONCEPTUAL FRAMEWORK FOR CURRICULUM	34
Values Assumptions Underlying the Career Development Curriculum (CDC)	34
Definitions of Career Education and Career Development	36
Dimensions of Career Education	39

SECTION

PAGE

VI. THE CAREER DEVELOPMENT PROGRAM: RATIONALE FOR THE SELECTION AND PLACEMENT OF DEVELOPMENTAL TASKS	43
Vocational Development Tasks	43
Level 1 - Primary, Grades K-3	46
Level 2 - Intermediate, Grades 4-6	51
Level 3 - Junior High, Grades 7-9	55
Level 4 - Senior High, Grades 10-12	58
VII. THE CAREER DEVELOPMENT PROGRAM: SPECIFICATION OF BEHAVIORS WHICH CHARACTERIZE EACH VOCATIONAL DEVELOPMENT TASK	62
Level 1 - Primary, Grades K-3	62
Level 2 - Intermediate, Grades 4-6	66
Level 3 - Junior High, Grades 7-9	71
Level 4 - Senior High, Grades 10-12	76
REFERENCES	81
APPENDIX	
A. CRITERIA FOR A COMPREHENSIVE CAREER DEVELOPMENT PROGRAM	91
B. WHAT CAREER DEVELOPMENT PROGRAM (K-12) WILL ACCOMPLISH	92
C. SELECTED MODELS IN CAREER EDUCATION	93
D. PARTIAL LIST OF CAREER EDUCATION RESOURCE PERSONS IN MINNESOTA.	96
E. THE COMPREHENSIVE CAREER EDUCATION MODEL (CCEM)	99
F. MEANINGS OF WORK	101
G. INFORMATION FOR BUSINESSES AND INDUSTRIES PROVIDING OCCUPATIONAL EXPERIENCE FOR TEACHERS	102
H. A PLAN FOR CAREER EDUCATION	104
I. GUIDELINES FOR SYSTEMS CHANGE IN CAREER EDUCATION	105

SECTION I

INTRODUCTION

Career education, although a relatively young overt movement in education, has existed in a variety of forms since the early 1900's. Perhaps there is more agreement about what career education is not than what it is. But most spokesmen agree that it is not a single course or unit; it is not vocational education; it is not something taught and learned in isolation; and it is not the responsibility of a single functionary in the schools. The current thrust indicates that it is a systematic, developmental K-adult approach, providing sequential, experience-based, and varied learning activities, with the classroom teacher at the heart of the program (Hoyt, 1972; Tennyson, 1971; Herr and Cramer, 1972). There is some agreement that career education requires involvement of all school personnel and a variety of community personnel and almost universal concurrence that the teacher, through the curriculum, is the main delivery system (Hoyt, 1972, Drier, 1972b; Keller, 1972b; Hansen, 1972a).

The recent thrust of career education which began formally with former Education Commissioner Sidney Marland's Dallas, Texas, speech to secondary principals in 1971, has aroused a lot of reaction among educators at all levels, positive and negative. Concerns center around such questions as, "Is it merely old wine in new bottles or does it really have something significant to offer education?" "Is it just another name for vocational education?" "Isn't it trying to slot people into jobs and glorify the traditional work ethic?" Other more pragmatic questions include, "How can

I teach career education in addition to all the other things I have to teach?"; "Where does it fit into the school day?"; and "How can a neophyte teacher who has only a surface knowledge of his or her subject know how to relate that subject to career education?"

One purpose of these modules is to try to answer some of these questions through a broadened definition of career education built on a solid rationale and a conceptual framework of human development and career development. It is a definition which draws from the best knowledge available in developmental psychology; career development theory and research, and learning psychology as a framework for practice. It takes into account the changing nature of both individuals and the environment and the concurrent need for flexible and adaptable human beings. We see it as an approach which offers possibilities for humanizing school environments, for unifying curricular efforts, for better exploring human needs and values in both the work and leisure domains, and for refocusing learning experiences to relate more directly to student interests, needs and goals.

Needs of Youth

That young people want and need more help in career development--in the process of finding out who they are and can become--is well documented in the literature on human effectiveness and adolescent development. The work of Erikson (1950), May (1961), Maslow (1968), Douvan (1967) and Project Talent (1972) and others has focused on human potentialities and the problems of coping with a complex, changing technological society. We are all well aware of the numerous educational critics who charge that the schools

are not doing a very good job of helping students in their search for identity and development as human beings (Silberman, 1971; Holt, 1964; Glasser, 1969). Career education offers one way through which students can be assisted in the vocational development tasks which face them at each stage of their lives. We would suggest that prospective teachers not only learn how to help their future students with these tasks but that they have an opportunity in their preservice training program to engage in self-examination regarding their own career development; that they have an opportunity to explore such questions as:

What is work really going to mean in my life?
 What kind of life style is it going to allow me to live?
 How am I going to know all the possibilities available to me?
 On what basis can I or should I make some self and career decisions, especially about teaching?
 How much education am I going to need to do what I want to do?
 What kind of skills will I need?
 Where do money, security, self-fulfillment, status, and responsibility fit into my value system?
 What kinds of jobs need to be created to change and improve society?
 What kind of job market will I face as I prepare for, try on, and try out the roles of a teacher?

Emergence of Career Education Programs

The emergence of hundreds of career education programs nationally and statewide suggests that it is much more than a bandwagon. One estimate indicates that there are several hundred K-12 programs under development across the nation. In Minnesota there are eight federally and state funded Exemplary Programs with approximately 150 other districts developing programs supported by private and district funds. In addition, career development programs in various forms have developed in community colleges, vocational schools, and liberal arts colleges. Acknowledgment of the need

for lifelong assistance in and attention to the career development of human beings from elementary years to retirement seems to be growing.

Career education appears to be a major focus of educational innovation in the seventies. But if the programs are to be effective, teachers must know their responsibilities and obtain the skills, knowledge, attitudes, and competencies needed to implement them. While there has been considerable activity in inservice education in career education, the amount of effort in preservice programs has been minimal. This is beginning to change as colleges of education realize that students, parents, and administrators are going to expect prospective teachers to have some knowledge and competency in this area.

There are several contingencies which will affect teacher functions and responsibilities as they are being defined and carried out in the emerging career education programs, and these also have implications for teacher preparation (see Appendix H). The teacher's responsibility is going to depend in part on the conceptual framework or model of career education used in the school system. It will also be affected by functions of other personnel--regular and special--who are involved in the career education program. For example, the question of whether the counselor is freed from typical administrative and crisis functions to have a central role in career education, whether trained paraprofessionals are available to assist teachers, whether parents and community are integrally involved, and whether there is a coordinator available will affect the teacher's role. The organization of the school will also have an impact: whether the school is traditional or open, the degree of autonomy and freedom of teachers to plan

activities outside the school walls, and opportunities for interdisciplinary cooperation will all affect ease, rate, and scope of implementation of career education. Teacher commitment and preferences, the nature and scope of the training program, the amount of teacher experience in the world of work, and the extent of teacher involvement in development of the program and practices all will affect teacher functioning. The most important contingency, however, is whether the teachers have been exposed to a sound preservice and/or inservice training program to help them develop attitudes and competencies needed for effective functioning in this emerging curricular thrust.

Teacher Education Programs*

A number of colleges and universities have given attention to the preparation of teachers for career education, but thus far efforts have been focused upon the inservice population rather than undergraduates. Elective courses in career development have existed for some time but new ones in career education are now being added; several colleges have sponsored inservice institutes; and several are working jointly with public schools in both teacher preparation and program development (Hansen, 1973). The career development of teachers has become a special concern of some teacher preparation institutions, especially with the tight job market for teachers.

A major effort is underway at Michigan State University under the leadership of Keith Goldhammer, Dean of the School of Education, who is

*Portions of this section and Section II are adapted from L. Sunny Hansen, Teachers' Responsibilities in Career Education Information Analysis Unit (Columbus, Ohio: The Center for Vocational-Technical Education, The Ohio State University, 1973).

trying to involve his entire faculty in the career education concept. At Ohio State University, a new course in career development for preservice teachers has been initiated under the direction of Joseph Quaranta. At Marshall University, West Virginia, Olson (1972) reports extensive involvement of the school of education with public schools in developing training programs and curricular materials. Several elective courses for graduates and undergraduates have been initiated in the principles and practices of career education. The concept of "curriculum blending" has been introduced, in which mathematics, science, fine arts, social studies and language are related to career education through such activities as career clubs, field trips, guest speakers, group projects, interaction groups, individual projects, lectures, multi-media activities, psychomotor activities, reading assignments, simulations, and writing assignments (Olson, 1972).

The ABLE (Authentic Basic Life-Centered Education) Model Program at Northern Illinois University uses the world of work as the "organizing center" for the curriculum of the elementary school. It encourages teachers to develop a career education plan from a personal base through the philosophy of "Take an idea and see where it leads you." The project suggests interviewing and group conferences as two basic skills of communication children need to carry out the program (Wernick, 1971).

ETC, an Eastern Illinois University project for Enrichment of Teacher and Counselor Competencies for Career Education, has been under way since the summer of 1972. Bibliographies, resource units, and teaching units for teacher and counselor education are being developed (Peterson, 1973). Bailey (1970), at Southern Illinois University, has focused on pupil out-

comes and learning materials in A Curriculum Model for Facilitating Career Development. Several interdisciplinary thrusts are under way at the University of Georgia, with counselor education, vocational education, curriculum, administration, and teacher education involved.

Northern Colorado University at Greeley reports a variety of career education inservice and preservice projects. A Center for Career Development has been established in the College of Education and several courses in career education are being initiated. In a model for preservice teacher education, Keller (1972b) suggests two required career education modules for majors in education prior to certification--"Subject Matter Application" and "Pre-Teaching Module." Others offered are "Careers in Education," "Society and Work," "Guidance and Counseling for Career Planning," "Basic Technology," "Career Education," "Clustering Techniques for Career Education," and "Vocational Education." Other career education features include team advisement, placement of students in business and industry for related occupational experience, and utilization of community advisers (Keller, 1972b).

Through the University of Minnesota, College of Education, extensive career development inservice programs have been implemented for several years by the Departments of Distributive Education and Counselor Education. Using a systems model and supported by State Department of Education funds, University faculty have developed a series of inservice summer workshops with various combinations of educators (vocational educators, counselors, secondary teachers, administrators, elementary teachers, and K-12 personnel). The workshops have combined group process, community building, and exploratory work experiences with the content of career development, including such

topics as the career development concept, illustrative models and programs, school and community resources and media, meanings of work, trends in the labor force, strategies for educational change, leadership development, curriculum development, and career needs of women and minorities.

Besides action plans for local program development, outcomes have included development of a set of behavioral objectives and suggested teaching-learning experiences (Tennyson and Klaurens, 1968); a K-6 guide for Career Development and the Elementary School Curriculum (EPDA Institute, 1971); and teacher-developed classroom and building plans for teacher use in infusing career development into the curriculum (Hansen and Borow, 1973). Another aspect of the program has been the development over the past five years of a sequenced set of performance and enabling objectives relating to vocational development tasks at the primary, intermediate, junior high, and senior high levels; seven learning packages (LOPs) for the senior high teacher to incorporate into curriculum; and three junior high packages relating career development to English, Home Economics, and Industrial Arts (Tennyson, Klaurens, and Hansen, 1970). These teacher-oriented materials are being published by the Minnesota Department of Education, Pupil Personnel Services Division. Three career development courses offered in the Department of Counseling and Student Personnel Psychology serve both counselors in training and inservice teachers, administrators, and other personnel working in K-adult career education settings. A Career Development Lab for use by teachers and counselors is also available.

At the preservice level, the University of Minnesota team has developed the modules contained in this package for use in elementary and

secondary preservice programs (in methods courses, introductory education courses, clinical experiences, curriculum courses, foundations courses, etc.). Project TECE, Teacher Education for Career Education, is operating under an EPDA grant which provides for development of these modules, one for elementary and one for secondary, to be disseminated in a statewide conference involving all teacher preparation institutions. It is hoped that participating teacher educators will field test the modules with education undergraduates during the 1973-74 academic year and provide data on their effectiveness. A career development programmed module for direct use by preservice students was piloted in the introductory secondary education courses in 1971-72.

The Division of Vocational-Technical Education in the College of Education has made a major priority commitment to career education and is incorporating career education concepts into a number of its graduate and undergraduate courses. Besides developing an "Education for Work" model, the staff of the Research Coordinating Unit is involved in evaluating teacher activities in the eight exemplary programs and is developing instruments for this evaluation.

A College-wide Career Education Task Force with representatives of all divisions also has been established to determine the directions in which the College of Education should go with respect to preparing teachers for career education. The Task Force co-sponsored the TECE conference and is developing a position paper.

These are just a few of the ways in which teacher preparation institutions are responding to the growing needs for teachers with career

education competencies. While there are no full-blown programs of pre-service teacher education for career education, some promising steps have been taken to attend to the problem. A number of questions remain about what the nature and scope of these programs should be. Several writers have addressed themselves to this question, and these are discussed in later sections.

The Teacher Education Modules--Organization and Content

It is obvious that underlying the creation of these modules is an assumption that career education is a significant movement in education serving student needs. It is the purpose of these modules to help meet the need for teacher competency in career education at the elementary and secondary levels. Although the modules might also be used in inservice or staff development programs, their primary intent is for use at the pre-service level so that future teachers will have a thorough exposure to the concept and its practices early in their preparation for teaching.

It is hoped that these modules will be used by teacher educators in flexible ways and that the substantive ideas and practical applications and resource materials will be adapted for various teacher preparation settings and courses--whether in introductory courses, supervised field experience, curriculum courses, foundations courses, methods courses, or clinical experiences. While the modules do not cover all aspects of career education, they deal with the major concept and applications to the classroom.

There are three modules. Module I, Orienting Prospective Teachers in Career Education, is intended to serve as a substantive resource handbook

for the teacher educator, providing materials which could be used as frameworks for lecture notes, discussions, and seminars. It provides some background on the need for career education, a brief historical overview of the emergence of the movement, a description of the current state of the art, and a comprehensive model through which preservice teachers can be oriented to the broad, humanistic concept of career development. It also presents some theoretical underpinnings, a rationale, and a set of redefined vocational development tasks and related performance objectives developed over the past five years by a team of University faculty and graduate students. It concludes with a list of printed and human resources which can be used by teachers or teacher educators, along with supplementary material which might serve as handouts for the preservice students.

Module II, Preparing Elementary Teachers for Career Education through Curriculum, is a "how to" package, offering suggestions for ways in which a prospective teacher might integrate career education into subjects at the primary and intermediate levels. It includes illustrative lessons for each grade level, tied to the Career Development Curriculum (CDC) objectives and developmental tasks. It is by no means comprehensive but rather is intended to suggest ways in which a creative elementary teacher might refocus traditional content around a career development theme. Students who wish more detailed ideas should be referred to some of the elementary level curriculum guides and resources cited in the Appendix. A few methods through which a teacher educator might orient students to career education are also included.

Module III, Preparing Secondary Teachers for Career Education through Curriculum, is also an applications package, geared to the junior and senior

high school. It consists of a series of illustrative lessons through which a secondary teacher might relate his or her subject to careers or career development. Again, the sample lessons are neither comprehensive nor exhaustive but merely intended to suggest a process by which prospective secondary teachers might begin to think about students' career needs and the relationship of career education to their subject. Much of the translating of career development into the particular subject will have to be done by the teacher educator and teacher, but it is hoped that this mini-course will provide a few handles for doing so. Rather than attempting to separate out junior and senior high activities, the module has been developed around Basic, Intermediate, and Advanced lessons. Again, the lessons are tied to the redefined developmental tasks of the CDC. In addition, the module contains selected resources for secondary teachers, along with sample forms which might be used as handouts for preservice secondary teachers in their own self-education regarding career education. Suggested methods through which a teacher educator might orient secondary students to career education are also included.

SECTION II

COMPONENTS OF TEACHER PREPARATION PROGRAMS

Several critical questions can be posed regarding teacher preparation programs for career education: 1) What does a teacher need to know about career education to function effectively? 2) What kinds of attitudes and skills does he or she need to have? 3) What methods or strategies can he or she utilize in implementation? 4) How can the effectiveness of the career education efforts be evaluated? While teacher preparation models need to be developed, many writers agree that preparation programs ought to deal in some measure with the following components of career education, elaborated more fully below:

- 1) DOCUMENTATION OF THE NEED FOR CAREER EDUCATION (Hoyt, 1972; Goldhammer, 1972; Tennyson, 1971; Hansen, 1972b, Gysbers and Moore, 1972b; Drier, 1972b; Keller, 1972a).
- 2) ORIENTATION TO THE CAREER DEVELOPMENT/CAREER EDUCATION CONCEPT (Hoyt, 1972; Drier, 1972b; Hansen, 1972a).
- 3) ORIENTATION TO THE WORLD OF WORK (MEANINGS, TASKS, CLASSIFICATION, STRUCTURE, AND TRENDS) (Hoyt, 1972; Keller, 1972b).
- 4) KNOWLEDGE AND USE OF SCHOOL AND COMMUNITY RESOURCES (Swanson, 1973; Hansen, 1972a; Hoyt, 1972).
- 5) STRATEGIES FOR IMPLEMENTATION THROUGH CURRICULUM (INFUSION THROUGH SUBJECTS) (Tennyson, et al., 1970; Hoyt, 1972; Swanson, 1973; Goldhammer, 1972).
- 6) GUIDANCE AND COUNSELING SKILLS RELATED TO CAREER EDUCATION (Swain, 1971; Hansen, 1972).
- 7) CHANGE PROCESS ACTIVITIES TO FACILITATE ACCEPTANCE AND ADOPTION BY TEACHERS AND COMMUNITY (Drier, 1972b; Keller, 1972a).

The Need

There is considerable agreement that if career education is to become an integral part of the curriculum, teachers, administrators, counselors, and others must be convinced of the nature of the career development problem and the concomitant need for career education. Numerous writers have addressed this question (Hoyt, 1972; Goldhammer and Taylor, 1972; Hansen, 1972b; Gysbers and Moore, 1972a). From a vocational education philosophy and framework, the need is often posed in relation to high school and college dropout figures and the lack of adequate vocational preparation, e.g., a marketable skill (Hoyt, 1972, Marland, 1972). The need from a humanistic career development point of view has been delineated by Goldhammer (1972), Schaefer (1971) and by Hansen (1972b). One of the difficulties of obtaining commitment from both teachers and teacher educators is establishing the cruciality of career education through curriculum when other more immediate or more dramatic areas such as drugs, sex, ecology, and human relations education are also vying for time. But educators increasingly are becoming aware of the interrelatedness that exists and of the preventive potential of career education in dealing with these other areas of concern. The need is further delineated in the section on social issues and career dilemmas.

The Career Education Concept

While many agree that there is no single career education concept or definition, most training programs provide some conceptual framework or explication, usually reflecting their own bias or preferred definition.

Most include basic elements or dimensions and objectives which cover aspects of self-awareness, occupational awareness, and educational awareness, and decision-making or planning behaviors (see Appendix E). Emphases and components vary, some placing more stress on the occupational awareness, others focusing more on the self development aspects (The Center for Vocational and Technical Education, 1972; Tennyson, Klaurens, Hansen, 1970; Drier, 1972b).

Orientation to the World of Work

The need for teachers to be knowledgeable about business, industry, and labor often has been stated and has become even more critical in times of a tight economy and labor market. Academic educators and counselors often have been criticized for having a limited knowledge of or experience in jobs outside of academia. Most career education training programs, therefore, incorporate some kind of focus on exploratory work experience for teachers and other educators whose exposure to occupations outside of education has been limited (see Appendix G). Information about the structure of the labor force; the organization of the work world and ways of clustering occupations, especially in relation to subjects; changing work ethics; manpower and womanpower trends; and the social-psychological aspects of work is also included in some training programs.

Information Systems and Use of Resources

The information explosion has made it difficult for individuals (teachers, students, adults) to obtain the information they need for developmental career decisions. Identifying and utilizing the resources of

school and community to assist in occupational and self exploration is acknowledged to be an important part of career education. All kinds of human resources, assessment instruments, media, and strategies become the "tools" for implementing career education programs (Hansen and Borow, 1973). Teachers need help in identifying and using human resources in the school, in business, labor, and industry, and among parents and community. They also need to know when and under what circumstances resources are available, how they might be utilized, and under what conditions they might facilitate most effective learning. Teachers also need to be aware of the numerous printed, film, computer, and other media resources now available in career education. The establishment of various kinds of career centers or career resource centers as a central component of career education programs (both in public schools and in training institutions) is becoming increasingly common.

Implementation through Curriculum

The "how" of infusing career education into curriculum has become one of the most important concerns of teachers faced with career education responsibilities. The literature suggests that teachers can profit from examining illustrative programs and efforts of other teachers, and that they need to examine their own curriculum and to learn a process by which they can utilize career education concepts in their subjects (Swanson, 1973; Tennyson, et al., 1970; Hoyt, 1972). Among the many resources which suggest sample objectives and learning strategies are the Career Education Resource Guide, 1972; Career Education Inservice Training Guide (Keller,

1972); Career Development Curriculum (Tennyson, et al., 1970); Career Development and the Elementary School Curriculum (EPDA Institute, 1971); and Elementary Guide in Career Development (Harwood, et al., 1972).

Guidance and Counseling

While many writers acknowledge the importance of guidance as part of career education, the form in which the guidance functions will be carried out has not been well delineated. The AVA-NVGA Commission on Career Development in a recent position paper (1973) identifies the counselor or guidance specialist as having a central coordinative function in career education, but not all writers agree on this point. If career education becomes pervasive through curriculum, it is likely that teachers will assume more of the educational-vocational guidance function and will need in their preparation programs some counseling skills. Hansen (1973) suggests a variety of ways in which counselors can work with teachers and curriculum in career development programs. Another direction indicated is that of identifying teachers who relate especially well to youth and who, with special training, might become career advisors, guides, or teacher-counselors (Swain, 1971; Hansen, 1973).

Change Process

The need for teachers to be aware not only of career education content but of the process through which changes are brought about in school systems has been acknowledged by many educators (Keller, 1972a; Schaefer, 1971; Drier, 1972b). It is well-known that the best idea may fail if adequate attention is not given to the process by which teachers

acquire not only knowledge and competency but a sense of commitment to the innovation (Drier, 1972b). This has a special meaning for preservice teachers entering school systems as neophytes with new ideas and methods to which older teachers may not have been exposed (see Appendix I).

These seven components are among the major areas of emphasis in emerging career education teacher training programs. It is apparent that there is a burgeoning of activity nationally to prepare teachers for career education responsibilities. While there are already many operational inservice programs sponsored by federal funding, city systems, teacher education institutions, and local districts, there are a few attempts to infuse career education concepts and practice into preservice education. In view of the lack of any comprehensive preservice models, teacher education institutions have a unique opportunity to develop their own. With the present growth rate of career education, colleges of education will need to give much more emphasis than presently exists to preparing teachers for career education functions in the elementary and secondary schools.

SECTION III

CAREER DILEMMAS AND SOCIAL ISSUES

Most of us as educators are concerned with making a good educational system better. We are reminded every day of the social problems which make it imperative that we seek some additional educational solutions beyond the discipline-centered solutions of the past. Many of these issues--e.g., housing, civil rights, ecology, poverty--really revolve around occupational dilemmas or career decisions of individuals. One of the most potent arguments for career education is that it speaks directly to these dilemmas. The need for career education in the schools is directly related to some of the most vital concerns both of individuals and society. These dilemmas are described briefly below.

Changing Meanings of Work in the Human Experience

The message has been coming across loud and clear that people are becoming more alienated from their work, that they are not getting the satisfactions expected, that they expect what Levenstein (1973) calls "psychic income" as well as financial income. The mass media are filled with articles and programs about the meaninglessness and dehumanization of work. Another kind of message is coming from the students who are not accepting our traditional work values. They are saying, "Don't force me into your traditional jobs; help me find work that will help me change and improve society. We want activities and jobs that will make society a better place. I want to be judged by a human identity, not an occupational label." They are concerned about the roles various occupations play in

fulfilling social and economic needs. Some are saying that while the role of worker and making a contribution to society are important, they are also concerned about their roles in family, politics, and community. Indeed we are seeing a variety of work patterns influenced by different work values, changing leisure patterns, and reexamined individual needs and goals (see Appendix F).

Changes in the Structure and Composition of the Labor Force

A major concern is one we have heard many times--that 80 per cent of the jobs of this decade do not require a college education--this at a time when the great American dream of college for everyone still seems to dominate the American imagination. Another change is the increasing gains for Blacks in the labor force, as well as the fact that more women are entering the labor force and are also asking equal opportunity in education and employment. We recently have become acutely aware of problems associated with employment in which we do not have enough skilled workers in some fields but overtrained and underemployed workers in others. The trend from a goods-producing to a service-producing economy, from production to human services, is well-known. We are also aware of the fact that technology is causing major changes, with some jobs disappearing, others being created, and the possibility that the developmental tasks and work tasks facing individuals in the year 2000 may be very different from those of the 1970's.

Problems Associated with High School, College, and "Corporate" Dropouts and Their Needs for Flexible Educational and Occupational Programs Which Provide for Entry, Exit, and Reentry at Different Stages of Life

We know that in spite of the many programs of the late sixties to provide skills, jobs, and training for those unprepared to enter the job market (Neighborhood Youth Corps, Manpower Development and Training Program, Occupational Information and Skills Centers, and the like), the high school dropout problem is still very much with us. Career education also has highlighted the needs of the college dropout, for we are told that of the 40-50 per cent who typically go on to college, only half of those will obtain a college degree, the others left to flounder without alternative goals or guidance. Former Education Commissioner Sidney Marland (1972) charges that the net result is that 80 per cent of our school population does not get adequate vocational guidance and placement assistance. Recently we also have seen a third kind of dropout, the adult worker or "corporate dropout" who is tired of the rat race in which he finds himself and wants a new life style. Increasingly we are seeing this kind of midlife career shift among workers who are not willing to spend their lives locked into a job or company so they can obtain the 50-year watch.

The Walling Off of Students from the Work World, of the Employment-bound from the College-bound, of Academic from Vocational, of School from Work

With employers' insistence on at least a high school diploma for most jobs, we have seen many youth isolated from the work world. Our traditional programs have forced students to choose early between academic and vocational, with the result that vocational students have been the only ones given a direct exploratory experience--which unfortunately has been

looked on as something you do if you cannot handle the academic curriculum. This walling-off has resulted in an unfortunate dichotomy in which work is something for the employment-bound, and college-bound students defer as long as possible any thinking in vocational terms--at least until recently. It has caused a tracked, fragmented curriculum which has not capitalized on the possible ways of integrating academic and vocational subjects to make school more relevant to learner goals, plans, and needs. Many human beings in the school are tired of these walls and want them down, and career education speaks most forcefully to this dilemma of breaking down the walls that serve only to obstruct communication and the development of human potentials.

The Information Deficit Dilemma in Which Students Do Not Have Adequate Information about Self, about Occupations (Especially the Psycho-social Aspects), or about the Career Decision Process

One of the things we have learned through career development research is that students and often adults make career decisions with an information deficit. Katz (1963) has said, "Students do not know what [information] they need, they do not have what they want, and they cannot use what they have." There is considerable evidence, for example, that they have a paucity of information about occupational and educational options; that they often have misinformation; and that they make career choices from a very limited range of occupations often based on myths, glamour, and stereotypes. Most students have not had opportunity to obtain accurate, adequate information either about themselves, their aptitudes, interests, and values --what they value, what they can do, what their priority values are, and

how they want to act on those values through the choices and decisions they make. Often the information they obtain is objective and logical instead of what Samler has called "psycho-social," meaning the life style it affords and the psychological meaning it has in the life of an individual. Moreover, many young people do not have access to information resources or working role models through whom they can get this kind of exposure. They also need to be informed about the process of career decision-making, to discover that it is no longer a one-shot, one-choice-for-life decision but a series of developmental decisions and roles starting in the elementary years and continuing into retirement.

The Special Needs of Bypassed Populations, Those Who Have Been Outside the Opportunity Structure, Who Have Not Had Much Control over Their Own Career Lives, Especially Ethnic Minorities and Women

The "band-aid" kinds of operations of the 1960's barely touched the surface of minority problems, and dealt with remediation rather than prevention. As Feldman (1967) points out so well, the schools are responsible for preparing all individuals for full participation in the economic life, and yet for many economically deprived individuals, we have not equipped them with the skills, the competencies, the sense of agency, or the positive self-concepts which allow them to obtain a better job and become effectively functioning human beings. The reluctance of the schools to relate curriculum to the world of work--with its roots in the old general education-vocational education controversy--has done a special disservice to those who have been outside the opportunity structure. Career education, as one means of bringing education and work closer together, offers some promise.

The career development needs of women have received little attention, but this, too, is beginning to change. But the facts about women in the labor force, along with the rising concern expressed through the Women's Movement, make explicit the need for women to know the many life style options, to be able to choose freely from a variety of roles in life, and not to be forced into one mold or career pattern for all. The creation of career education programs cognizant of the changing role and status of women will also dramatize the parallel concern about its impact on the family and work roles of men. The startling facts about women in employment--the limited opportunity in stereotyped occupations, the discrimination in salary and promotion--are matched by concern about the lessened opportunities for self-fulfillment which a tight labor market presages. The problems of lack of planning, lack of work orientation, and lack of identity have been especially complicated for girls whose planning typically is as a stop-gap until marriage; whose main identity has been through a husband's occupation; and whose roles have been prescribed by society as those of wife and mother. All of these dilemmas reflect the need for some major educational changes.

The Case for Career Education

We like to think that career education is more than a passing fad, more than a bag of tricks, more than vocational education, more than preparing young people for the labor market. We see career development as a broad and inclusive concept which, while not covering all of education, probably covers more aspects of what we are about in education than any

other single theme. We see it as a response to some basic unmet needs in individuals and in society. The detailed career development concept described in the rest of this module is built on certain postulates:

1. Career education is a national educational movement which is seeking to improve the human condition, especially with regard to the way the individual interacts with work environments.

2. Career education is a convergence of several historical trends in American education--of vocational education, vocational guidance, and career development--leading to a more humanistic curriculum.

3. Career education provides a vehicle for helping each individual student discover his or her possibilities, for finding out who he or she is in relation to society.

4. Career education is a vehicle which holds promise for educators to open doors to individual self-fulfillment for their students as well as themselves.

These will be elaborated upon in the section which follows.

SECTION IV

CAREER DEVELOPMENT: A BASIS FOR CAREER EDUCATION

The authors' interest in career development has emerged over the past ten years out of a deep interest in helping young people develop into fully functioning and effective human beings. Out of backgrounds in English, counseling, and vocational coordination, we have become aware of the extent to which many young people--and increasingly many adults--are not realizing their potentialities because they have failed to work out the relationships between themselves and their society.

Why Career Education?

For a number of years students have been saying, "Give us a more humane environment, more humanizing relationships." They also have been saying, "Give us a more relevant curriculum." Relevance is found when that which is being learned enables one to understand the meaning of his life, and when experiences are provided which help tie together individual and community interests (Tennyson, 1971). We believe that we as educators have fallen short in not helping the student see how skills and concepts being taught relate to the larger context of human behavior and social aspiration in the work and leisure worlds. Educational critics suggest that the expectations of the schools are too often unrelated to the expectations students will face when they leave school. In the last few years thousands of college graduates have not been able to find employment in their field, and Labor Department figures indicate that eight out of ten jobs of the next decade will not require a college education. What human skills will

be needed in the year 2000 is being speculated upon by educators and futurists. It appears that we are preparing students for a relatively static world when we should be preparing students for a world in flux.

The implications for career education are enormous. It is no longer sufficient to equip a student with the skills required for a specific occupation, for that occupation may not exist ten or twenty years hence. Rather, the student must be given the means to adapt to a changing environment. He or she must become aware of the process of education in addition to content. He must focus not merely on choice of an occupation but on how to choose; he must learn not merely to make wise decisions but to make decisions wisely. He must come to terms with himself as a growing, changing person in an ever-changing environment (Antholz, 1972). It is our belief that this process can be facilitated through a systematic approach to career development in the schools.

This kind of approach suggests a quite different view of career development or vocational guidance than merely helping students obtain occupational information or choose a job or college. Career education becomes not only a vehicle for unifying curriculum around student needs but with potential for humanizing the school through providing the student with greater opportunity to experience who he is as a person and to change the school in ways that facilitate his development into a vocationally mature human being aware of and prepared to do something about the major social issues facing our nation (Hansen, 1972).

The career education curriculum becomes a vehicle for preventive education, acknowledging that a primary task of the school is development

of positive self concepts, helping students obtain control over their own lives, and maximizing their vocational possibilities. It offers a curriculum which helps each individual examine the meaning he wants work to have in his life and the life style he envisions--the needs he has for leisure, self-esteem, community involvement, for family relationships, for security, for adventure, for status, for power, for self-fulfillment--in other words, a school system which asks not "Where do Johnny and Janie best fit?" but rather: "How do work and leisure fit into the kind of life Johnny and Janie want and the kinds of persons they perceive themselves to be?" Not "How can they be shaped to work, but how can work be shaped to individuals?" Not just "How can they fit into jobs which exist, but how can they help create jobs which fulfill their personal needs and also contribute to the world's unfinished work: the improvement of society, the resolution of contemporary social issues, and raising the quality of life for all?" This is the liberating and humanizing potential of career education.

Historical Perspectives

To understand where we are in career education today, it may help to get a little historical perspective. Sputnik provided an impetus for the discipline-centered curriculum changes of the sixties which sought to improve subjects--especially mathematics and science--through such projects as SMSG, PSSC, Project English and Project Social Studies. Prior to that there was at various times a focus on child study, the core curriculum, and the Dewey Action School (Hansen, 1972).

Three other educational developments also laid the ground work for the current career development thrust. At the turn of the century humani-

tarian social workers and vocational educators began to be concerned about the needs of human beings in relation to occupational roles. Vocational educators recognized that individuals at that time needed more training and better skills to prepare them for a complex industrial world. Vocational guidance was born when Frank Parsons, generally acknowledged as the "father of vocational guidance," set up a Vocations Bureau in Boston to provide a new set of human services for relating individuals and jobs. He had a fairly simple and explicit model for helping people: You help them obtain information about jobs; you help them look at themselves, their abilities and interests; and then you help them engage in "true reasoning" about the two. Thus was created the "matching model" of occupational choice.

With the advent of the psychology of individual differences and the test and measurement movement, there was developed a variety of tools and instruments to aid in the occupational decision. The problem, however, is that the tests became instruments for selection and placement especially used by colleges and industry, and the model presumed the existence of an expert who had the answers and could tell you which way to go (Hansen and Borow, 1973). Thus the original Parsonian approach, created out of humanitarian motives to meet a societal need, became a matching model of individuals and jobs. And that model has found expression in what has been the chief vehicle for vocational guidance in the schools, namely, the ninth grade occupations unit in which the young person typically looks at himself, studies one or two occupations, and chooses one that he wants to be. One of the problems with this model is that it was oriented toward a stable job market, unchanging individuals, and assumed a once-for-all career decision

at a given point in time, assumptions which have proved inappropriate for the contemporary world.

Since the mid-forties and early fifties, the field of counseling psychology has emerged with a strong focus on the self, and linking personal feelings about self with goals, achievements, aspirations and external realities. Super and his associates in 1950 began their twenty-year longitudinal Career Pattern Studies with ninth grade boys and in effect have helped create a new discipline and theretofore neglected aspect of human development called career development. Their unique contribution has added a dynamic dimension by helping us look at the developmental aspects of occupational behavior and a new construct called vocational maturity (Hansen, 1972).

Super defined career much more broadly than occupational choice. Rather, he saw it as a lifelong, continuous process of developing and implementing a self-concept, with satisfaction to self and benefit to society (Super, 1953). Equally important, occupation was seen as only one part of career, career being the sequence of positions one holds at various life stages, including those of student, family member, worker, and retiree.

Theoretical Underpinnings--Career Development Principles

The theory and research of Super, Crites, Ginzberg, Tiedeman, Gribbons and Lohnes, and others have provided much of the basis for career development programs in the schools. While the study of how people develop vocationally--their occupational roles and motives and needs for work and leisure--is a relatively new field of study, there are some things that we

have learned not only about socialization of adult workers, but about children and youth as well.

Career development is a process of integrating two constructs: self and the world of work. Tiedeman (1961) defines it as "self development viewed in relation with orientation, exploration, decision making, entry and progress in educational and vocational pursuits (p. 18). Ginzberg et al., (1951) describe it as "a continual process of working out a synthesis or compromise between the self and the reality opportunities and limitations of the world."

Choosing and entering an occupation is a major part of career development, but occupation is only one part of the vessel of career. In career development, the emphasis is more on the process of career decision-making than on choice; on career patterns over a lifetime rather than choice at a point in time; on psychological as well as logical aspects of work; on developmental stages rather than on once-for-all decisions; and on self-development rather than on occupational information.

The concept of career includes both occupation and the life style surrounding it. The way a person views himself determines to a great extent how he views life, especially that part of life called career. The keystone of career development theory is Super's precept that in choosing an occupation one is, in effect, choosing a means of implementing a self concept (1957). Thus self-concept is a powerful determinant in occupational choice, and formation of the self-concept assumes principal importance in the development of the individual. Kroll (1970) indicates that abilities and motivations for realistic self-evaluation can be fostered and developed

with individuals. This series of reintegrations of self-concept continues into adulthood. Just as self-concept affects career choice and behavior, so career has a profound effect upon the self (Antholz, 1972). Career development is the process by which the reconciliation of the individual and his or her work environment takes place. It requires understanding of self, of environmental alternatives, and of ways of relating the two (Herr, 1971). It also requires assessment of the ways in which work relates to other important aspects of life, e.g., family, leisure, community participation and to one's values and needs, e.g., for security, adventure, money, status, power.

Career development is subject to the principles of general human development, i.e., it is similar for all, it proceeds from general to specific, it is continuous, it proceeds at different rates, and it progresses through fixed and sequential stages (Hurlock, 1956). The development of human beings is at the core of the career development program; that is why we have preferred to start with the self, with the individual, rather than with the world out there.

Super's precept of multipotentiality--that each person has the potential for success and satisfaction in a number of occupations--attacks the assumption of an ideal occupation for every worker and that guidance must help the individual find the true fit. The multipotentiality concept frees the individual from the fear of making the "wrong" choice (a view which pervades the traditional Parsonian approach or matching theory). It also increases the options available to the individual. The individual's responsibility and thus his control are no longer centered on a crucial

single decision point but extend throughout his career life and may cover several decision points from early childhood throughout life (Antholz, 1972).

Maximizing the individual's control over his or her own life and his own future is an important tenet of career development. Tiedeman calls this a "sense of agency," the power to direct one's future and determine what he is to become. This means the individual must obtain the skills with which to choose and plan, that he or she must learn how to choose as well as what to choose. Katz (1973) suggests that the basic choices of work and non-work are choices among values and value systems--that each individual makes self appraisals, evaluates past performance, and his decisions and plans express his self concept.

These, in brief, are some of the principles underlying the Career Development Program presented in this module. For a more detailed discussion and background, the prospective teacher can be referred to some of the career development texts and references indicated in the Appendix. For an excellent summary and discussion of implications for curriculum, see Conceptualization of a Model Career Development Program, K-12 (Antholz, 1972) in the University of Minnesota Career Development Lab. We can now turn then to the Career Development Program as a conceptual framework for curriculum.

SECTION V

THE CAREER DEVELOPMENT PROGRAM: A CONCEPTUAL FRAMEWORK FOR CURRICULUM

Over the last several years the authors, along with Mary Bee Antholz and several other very capable graduate students, have been conceptualizing a K-12 career development curriculum. Although we recognize that career development does not end at the twelfth grade, we chose to concentrate our initial developmental efforts on those years. In our conceptualization we have been strongly influenced by the theorists and researchers just cited. Super's view suggests that school is part of one's career, and, more important, that the job of student should be a joyful, humanizing, growth-producing experience.

It is basically a self-development approach to career education which characterizes the Career Development Program. Rather than a labor market-occupational information focus, the emphasis is on human development. The program suggests that the world of work can be used as a vehicle for self exploration. It is a concern for total curriculum: rather than improving subjects by bits and pieces, it has brought us closer to what Goodlad (1968) called "a humanistic curriculum" based on human interests and values. It asks us again to examine the entire curriculum and the larger questions of what we are educating for and why.

Values Assumptions Underlying the Career Development Curriculum (CDC)

Goodlad and Richter (1966) have spelled out a detailed procedure for formulating curriculum, suggesting that one begins with values, then derives educational aims from values, educational objectives from educational aims,

and learning experiences from educational objectives. Goodlad indicates that the process of deriving educational aims goes back to selection among values and that any curriculum effort should inform readers of the value decisions already made.

The value rationale underlying the Career Development Curriculum (CDC) has been drawn from two sources: 1) from those social and behavioral scientists who advocate a goal of liberation for education through the "examined life"; and 2) those in the field of vocational education and occupational sociology who postulate that an individual's work constitutes a major factor in his or her life style, providing many of the basic motivations for behavior and conditioning the roles he will play in society (Tennyson, 1971). Thus three general value assumptions undergird the CDC learning objectives and experiences:

1. Students need to be provided experiences which foster a process of valuing and value-thinking.
2. They should be given opportunities to clarify and test their value-thinking in interpersonal engagements with peers, and they should be provided with appropriate feedback regarding the effectiveness of their interpersonal behavior.
3. The students must be provided reality experiences which will enable them to test their values and evolving self-concepts in the larger community and world of work.

A number of related but more specific value premises undergirding the CDC include the following:

First, personal or self development consists of mastering all the skills and understandings normally taught in English, mathematics, and other subject matter areas, but it entails also a process of self discovery which is facilitated through career exploration. Vocation and the work world offer

one of the most natural frameworks for clarifying values and meanings about oneself.

Second, occupational motives, worker attitudes and other vocationally relevant behaviors are the result of a complex process of development. A systematic exposure to the expectations of industrialized society is vitally important in the socialization of the young person. However, these expectations should be cast as problematic situations to which the student can react, fashioning his own range of responses, with clear awareness of the consequences of each.

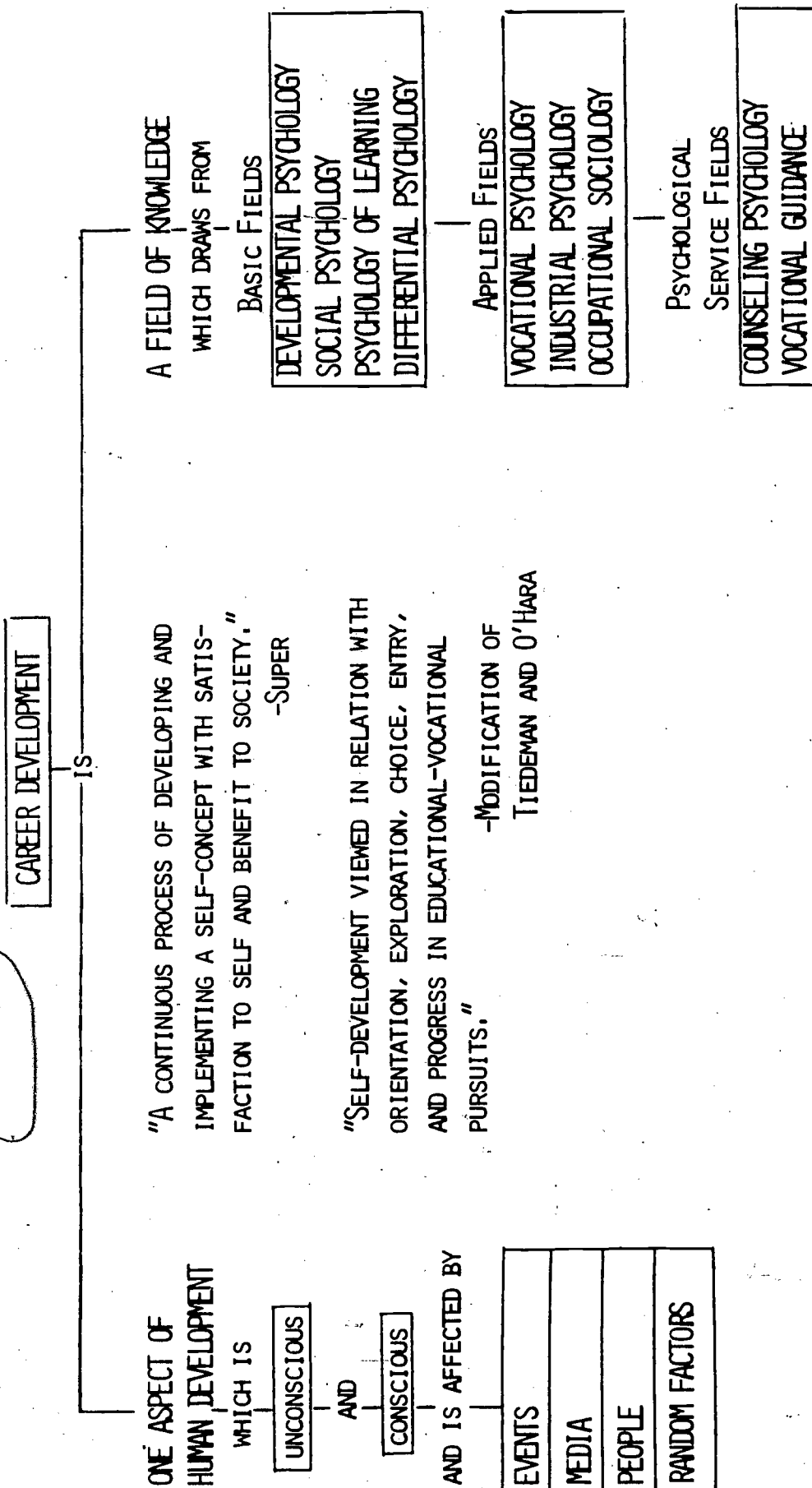
Third, a world growing more complex each day requires that students be provided a broadened base for experiencing the realities of life and living. The need is for more of an experience-based curriculum in a reality-bound context.

Fourth, curriculum construction should focus upon developing the individual's abilities and aptitudes, rather than perpetuating a tradition which too often has tended to focus on aptitudes already developed rather than those not yet tapped.

Definitions of Career Education and Career Development

In our work on the Career Development Curriculum, which is an attempt to translate the broad career development principles into a systematic set of learning experiences, we view career development as a process, as a part of human development which occurs whether we do anything about it or not. We see career education as the teaching and counseling and community interventions which facilitate that development. These definitions are presented graphically in Figure 1 and Figure 2. We also

FIGURE 1

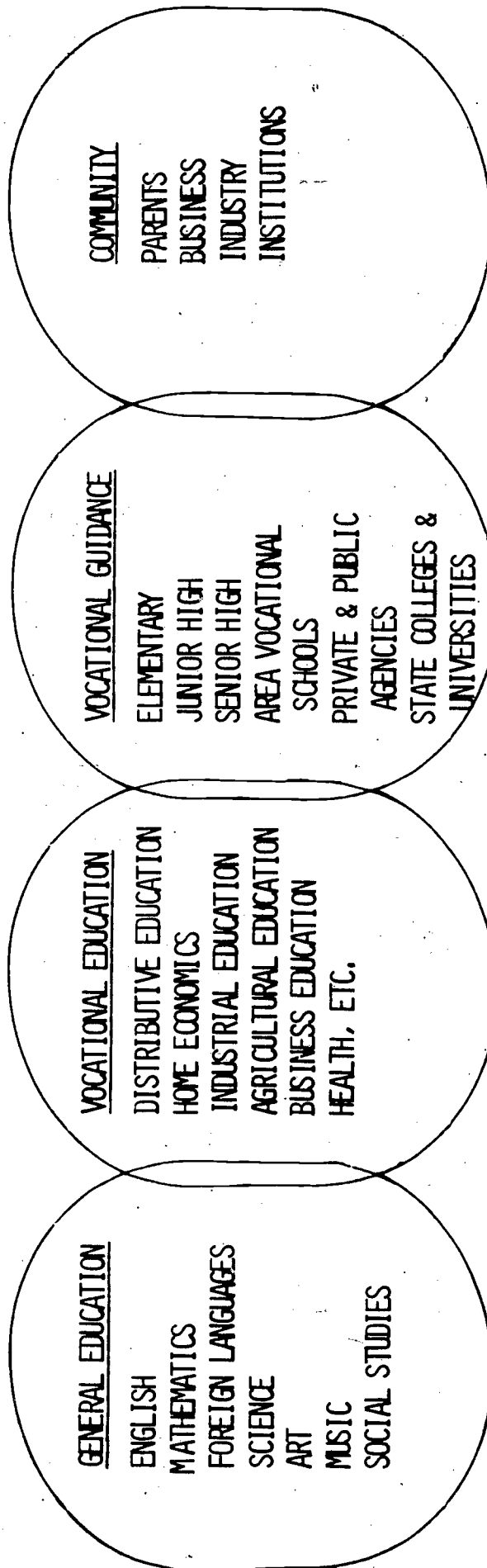


CAREER EDUCATION

IS

A CONSCIOUS ATTEMPT TO SYSTEMATICALLY FACILITATE AN INDIVIDUAL'S CAREER DEVELOPMENT, K-ADULT, THROUGH THE SCHOOL SYSTEM AND THROUGH COMMUNITY

IT REQUIRES A COORDINATED EFFORT OF ALL SEGMENTS OF THE SCHOOL AND COMMUNITY, INCLUDING



have identified ten dimensions of career development which give further definition to the concept and have attempted to state these in behavioral terms. They provide a broad framework for practice and relate closely to the occupational dilemmas described earlier.

Dimensions of Career Education

The ten dimensions which comprise our broad instructional aims are listed in Figure 3. They are described briefly below.

Dimension 1 is the Self Dimension. It says that our major concern is with the self-development of human beings, that we must utilize the stimuli provided by occupational experience and career exploration to help the learner come to a clearer understanding of himself and his self characteristics.

Dimension 2 is the Occupational Information Dimension. This dimension is directed at helping students acquire occupational information and to use that information in decision-making. We believe that teachers who use career information in relating their subject to the world of work find this to be an effective way of motivating students to learn. It includes information about the way the world of work is organized, labor force structure and trends, and psycho-social information, as well as information about educational and occupational alternatives.

Dimension 3 is the Psychology of Work Dimension. Here we are dealing with what Samler has called "psychological man at work," the psycho-social aspects of a job and its impact on the individual. The aim here is to have the learner consider how work fits into his or her life and how it relates to other aspects of life.

Figure 3

DIMENSIONS OF CAREER EDUCATION

The student will:

1. identify values, interests, abilities, needs and other self characteristics as they relate to occupational roles. (self dimension)
2. explore occupational areas and describe opportunities, potential satisfactions, required roles of workers and other related dimensions. (occupational information dimension)
3. describe the psychological meaning of work and its value in the human experience. (psychology of work dimension)
4. describe modern work structure, and work environments, and organizational characteristics. (organizational dimension)
5. tell how the individual's role in work is tied to the well-being of the community. (social contribution dimension)
6. demonstrate planfulness in striving to achieve occupational goals and objectives. (planfulness dimension)
7. demonstrate through work-relevant behavior that one is acquiring a concept of self as a productive person in a work-centered society. (work ethics dimension)
8. describe that relationship which exists between basic skills, marketable skills, and interpersonal skills and the jobs one can reasonably aspire to in adult life. (school-work relationship dimension)
9. demonstrate possession of a reasonable degree of basic skills, knowledges, and behavioral characteristics associated with some type of work or occupational area. (occupational preparation dimension)
10. demonstrate through work-relevant behavior an ability to learn, adjust to, and advance in one's chosen occupation. (work adjustment dimension)

Dimension 4 is the Organizational Dimension. It alerts the student to the fact that he lives in an organizational world and that he may be affected by the communication patterns, power structure, peer relationships and authority relationships of both work and non-work organizations. Many of the problems and conflicts we experience in life stem from the way we try to manage our work organizations or are managed by them.

Dimension 5 is the Social Contribution Dimension. It is designed to enhance the individual's life by showing the importance of one's work to the community and its well-being. The student is assisted to discover the social significance of his work and the work of others.

Dimension 6 is the Planfulness Dimension. This is based on the assumption that the individual may have more control over his or her life if he is willing to do some planning rather than merely let things happen by chance. It reflects our interest in vocational maturity and the desirability of instilling in students what Super has called "planfulness" or with what Tiedeman calls "a sense of agency."

Dimension 7 is the Work Ethics Dimension. It is directed at developing those attitudes and dispositions characteristic of a responsible worker. It is not intended to glamourize or push the traditional work ethic but rather to help students examine how work and leisure fit into their lives and ways in which the work ethic is changing.

Dimension 8 is the School-Work Relationship Dimension. It attempts to help students see the relationship between present school subjects and future goals.

Dimension 9 is the Occupational Preparation Dimension. While it is most closely related to vocational education, it recognizes that all subjects in some ways are contributing to the development of vocational skills.

Dimension 10 is the Work Adjustment Dimension. Although this is more closely related to post-high school objectives, it can also apply to exploratory jobs during the high school years. It implies not merely adjusting the worker to the status quo but helping him or her learn ways to improve the work environment or to change the work environment if the situation is dehumanizing or incompatible with one's emerging needs, values, and goals.

These dimensions clearly support our view that career development and personal or self development are part of the same package. The CDC reflects our belief that work and leisure offer a natural vehicle for self-exploration and self-examination--not strictly an egocentric search for self but a socio-centric search for self in society. This, then, is the broad framework for the Career Development Program.

SECTION VI

THE CAREER DEVELOPMENT PROGRAM: RATIONALE FOR THE SELECTION AND PLACEMENT OF DEVELOPMENTAL TASKS*

Vocational Development Tasks

Drawing from the work of Piaget, Havighurst, and others, the Career Development Curriculum Team further refined and redefined a set of sequential vocational development tasks (DT's) framed in behavioral terms and translated into performance and enabling objectives. Recognizing the limitations of behavioral objectives, and the problems inherent in writing them, the team nonetheless decided to use a framework of terminal performance objectives (PO's) to indicate desired outcomes and enabling objectives (EO's) to suggest means for achieving performance objectives. The team was influenced primarily by Ralph Tyler (1950) and Robert Mager (1969) in formulating goals and objectives for the CDC.

The vocational development tasks and performance objectives form the core of the Career Development Program. The developmental tasks for K-12 are presented in Figure 4. Although development is continuous and school organization varies, it is both convenient and defensible to utilize as stages the traditional common divisions of the schools: K-3, 4-6, 7-9; 10-12. These levels can be used as indicators and general guides but not as hard and fast stages of development. This kind of conceptual base provides a framework from which a local needs assessment could be conducted, priority needs and goals established, and learning activities developed. Such career exploration experiences would be tied to developmental tasks but, recognizing varied levels of vocational maturity, not rigidly prescribed.

*Antholz, Mary B. Conceptualization of a Model Career Development Program, K-12. Unpublished master's paper, University of Minnesota, 1972.

Figure 4

THE CDC VOCATIONAL DEVELOPMENT TASKS

Vocational Development Tasks of the Primary Years

1. Awareness of self
2. Acquiring a sense of control over one's life
3. Identification with workers
4. Acquiring knowledge about workers
5. Acquiring interpersonal skills
6. Ability to present oneself objectively
7. Acquiring respect for other people and the work they do

Vocational Development Tasks of the Intermediate Years

1. Developing a positive self concept
2. Acquiring the discipline of work
3. Identification with the concept of work as a valued institution
4. Increasing knowledge about workers
5. Increasing interpersonal skills
6. Increasing ability to present oneself objectively
7. Valuing human dignity

Vocational Development Tasks of the Junior High Years

1. Clarification of a self concept
2. Assumption of responsibility for vocational planning
3. Formulation of tentative career goals
4. Acquiring knowledge of occupations and work settings
5. Acquiring knowledge of educational and vocational resources
6. Awareness of the decision-making process
7. Acquiring a sense of independence

Vocational Development Tasks of the Senior High Years

1. Reality testing of a self concept
2. Awareness of preferred life style
3. Reformulation of tentative career goals
4. Increasing knowledge of and experience in occupations and work settings
5. Acquiring knowledge of educational and vocational paths
6. Clarification of the decision-making process as related to self
7. Commitment with tentativeness within a changing world

The purpose of these developmental tasks is to help the individual develop openness to and control over himself or herself in relation to the world of work. The emphasis is on the individual: although development is similar for all, it proceeds at different rates (Hurlock, 1956). It is essential that the four levels of tasks outlined be interpreted as continuous, overlapping stages rather than discrete intervals. As Zaccaria (1970) has pointed out, "The unfolding of an individual's career development beginning in early childhood is seen as relatively continuous and long term, but divided into life stages or life periods for purposes of description and presentation [p. 55]."

The tasks themselves are not independent entities; rather they are interrelated both horizontally and vertically. Awareness of self at the primary level is related to acquiring a sense of agency, also at the primary level, as well as to developing a positive self-concept and clarification of a self-concept at the intermediate and junior high levels. Tasks at the same levels tend to facilitate each other, and those of one level must be completed if those at the next level are to be met most efficiently (Havighurst, 1952).

Career development stages, like physiological and intellectual development stages, are sequential but cannot be directly tied to chronological age. The periods in which most students undergo curricular changes were used as dividing points because it is at these points that they face new demands and need to be taught how to deal with them. While it may be possible to accelerate (or decelerate) the accomplishment of these developmental tasks, this may not necessarily be desirable. There seems

to be what Piaget terms the "optimal time" for accomplishing tasks, a time when learning is easiest and most efficient. Havighurst calls this the teachable moment, "when the body is ripe, and society requires, and the self is ready to achieve a certain task [1952; p. 5]."

Level 1 Primary (P)

This level encompasses the school years K-3. It is essential that career development start here, if not earlier. Nelson (1963) found that the occupational elimination process starts early in the elementary grades. In light of Luchin's primacy effect, i.e., that which is learned first carries most weight in ultimate decisions, teachers must avoid misinformation and misconceptions leading to occupational foreclosure. Gysbers and Moore (1967) state that

The lack of formalized career development programs will not result in occupational knowledge and value vacuums in students. On the contrary, occupational values and attitudes are formed (usually on the basis of fragmentary and incidental information) and are used as the basis for judgment. These inadequately formed values and attitudes concerning the work world (occupational stereotypes) provide a restricted and clouded view of the wide array of educational and occupational opportunities which may be available and in turn may produce inappropriate educational and occupational decisions [p. 3].

Justification for the placement of the tasks comes largely from the work of Piaget and Erikson, with corroboration from other developmental psychologists. The primary level tasks are related to Piaget's preoperational representations stage, which takes the child through the first grade or so, and the concrete operations stage, covering essentially the elementary school years. In the former, the child establishes relationships between experience and action and manipulates language and symbols primarily by

imitating models and accommodating his behavior to the behavior he observes in others (Sylwester, 1969). In the latter, the child becomes able to do in his head what formerly he would do with his hands, that is, he is able to think about things and deal with relations among classes of things (Elkind, 1968).

It is about this time that the child normally develops what Erikson (1968) calls the "sense of industry." Sooner or later, he says, all children "become dissatisfied and disgruntled without a sense of being able to make things and make them well--even perfectly [p. 123]." This period also corresponds with Wellman's (1967) learning phase of perceptualization, in which the focus is on the process necessary for an individual to become aware of oneself and one's environment and to differentiate among them (Gysbers, 1969).

Pl. Awareness of Self -- The child differentiates self from environment and realizes that he or she is a unique individual. He begins the process of differentiation and integration (accommodation and assimilation for Piaget) which will continue throughout life. This is the first step in the development of a positive self-concept. He can perceive how he differs though he cannot as yet conceptualize his differences. A good deal of this takes place before the child starts school, but the radical change in his environment when he begins school necessitates some focus on the task. In school he is faced, often for the first time, with a situation in which his role is the same as that of twenty or thirty age-mates. He must retain his self-awareness in order to build a true sense of identity.

P2. Acquiring a Sense of Agency -- This is related to awareness of self in that unless the child sees him or herself as a separate being, he cannot see himself as a causal agent. At the same time, it is through realization that he can in some manner control his environment that self-awareness is facilitated. It is at this task that so many of the disadvantaged fail (Kohl, 1967) with devastating effects on their later lives. It is important that a child have some kind of success in early encounters with any task if he is to have the confidence and desire to continue with that task, or any other. As Parnell (1969) states

When a youngster feels able to do a job--no matter what it is, so long as it is important to the child--he feels unique, confident and assertive about himself, and when he is happy with himself, he feels more tolerant toward others [p. 15].

This sense of control over one's destiny is essential to the child's ability to assume responsibility for his own actions, which should develop in this period (Super, 1963).

P3. Identification with Workers -- The concept of identification, articulated so clearly by Freud in relation to sex role development, extends to career development. Role models exert a powerful influence at this time (Tiedeman and O'Hara, 1963). Erikson (1968) stresses that

Children now also attach themselves to teachers and the parents of other children, and they want to watch and imitate people representing occupations which they can grasp--fireman and policemen, gardeners, plumbers and garbagemen.

This is an important step in the child's progression from "Work is something other people do," to "I am a worker." If the child is not given the opportunity to identify with workers, either at home or through the school, work adjustment will be much more difficult.

P4. Acquiring Knowledge about Workers -- The child at this stage generally has an insatiable curiosity about the world. Because of this interest, it is easy to provide basic information about a large variety of workers, especially if their work is visible. This interest tends to focus around the home and neighborhood; so then also might the information. Knowledge here implies more than having the teacher tell the child about workers. Piaget, Dewey, Bruner, and Erikson, among others, stress the importance of involving the child as an active agent in learning. Allowing the child to go out and talk to his or her family and neighbors about their work facilitates competence not only with this task but with the previous three as well. The more knowledge the individual gains at this time, the less likely he is to develop misconceptions and negative attitudes which are far more difficult to eradicate than they are to prevent.

P5. Acquiring Interpersonal Skills -- Again, this task is built on and contributes to the earlier ones. This task is crucial to the child entering school. Not only must he or she learn to get along with an authority figure who judges him on quite a different basis than do his parents, i.e., on the basis of what he produces, but he also must begin to cope with age-mates. Hurlock (1964) stresses that "From approximately the sixth year, socialization is of paramount importance." This is the gang age: how the child gets along with the other kids will make or break him socially for the next few years, at least. There is evidence (Pressey and Kuhlen, 1957) that a child who is not accepted by his peers in the elementary years is likely to have trouble all his life. Authorities also point out that the teacher can, especially through group work, help an underdeveloped child to gain acceptance.

P6. Ability to Present Oneself Objectively -- To achieve this goal of "objectification of self," the child must cease to consider other people as objects and recognize their humanness. If he/she can do this, he can recognize his own. He must be able to reveal himself in his strengths and weaknesses to others. Piaget stated that students should have many opportunities to work in group activities that free them from their ego-centrism and cause them to interact (Flavell, 1963). There are three phases of the objectification process as defined by Simons (1966): the "I" stage, the "Thou" and the "I-Thou." He defines no specific time when the individual should move from the "I" in which he sees others as objects, through the "Thou" in which one's observation of concrete humanity causes him to realize his objective or real self, to the "I-Thou," in which he can relate to others honestly and intimately. However, the child is ready to begin this process at the primary level. The sooner he begins it, the less difficult it will be for him, provided he is given a relatively safe place in which to reveal himself. The teacher can facilitate this by not making the risk of failure so high that the child won't try. An atmosphere in which mistakes are expected and tolerated, and above all one in which each individual is respected and accepted will facilitate objectification.

P7. Acquiring Respect for Other People and the Work They Do --

This task is designed not only to help the child come to value work, but to prevent occupational foreclosure. As Kokaska, et al., (1970) point out, there is no way of knowing for which jobs an individual is best suited when he is in elementary school, so from a pragmatic standpoint it makes sense to foster positive attitudes towards all kinds of work. Further, if people

in this society truly believe in the equality of individuals, that every individual is worth the respect of every other, then this attitude must be extended to one's work as well. If, as it sometimes seems, the doctrine is "honored more in the breach than in the observance," society would do well to revive it. Again, the child must be taught as soon as possible that all work is valuable, especially since many parents teach in an Orwellian sense that "some jobs are more equal than others." It is pragmatism as well as idealism which requires stress on this point: society needs garbage collectors as well as presidents, but unless respect is fostered for these jobs, society will be faced with qualitative, if not quantitative, shortages in these positions.

Level 2 Intermediate (I)

In the period from fourth through sixth grades the child continues to face the same kinds of tasks, but tasks of greater complexity. By the end of this period, he will have completed Piaget's concrete operations stage. While perceptual learning still occurs, he now enters the phase of conceptual learning. Where at the primary level the child could distinguish between various occupations, primarily on the basis of tool and uniform cues, at this stage he develops the ability to conceive of the functions of the occupations (Gysbers, 1969). The relevant vocational development stage as defined by Hershenson (1968) is that of competence: the child is concerned with what he can do. Erikson (1968) states that "nothing less is at stake than the development and maintenance in children of a positive identification with those who know things and know how to do things [p. 125]."

II. Developing a Positive Self Concept -- At this level the child should begin to conceptualize what he formerly only perceived. His self-awareness must expand into a self-concept. McNeil (1966) states that

Essentially, the notion of a self-concept is inextricably intertwined with the human capacity to think about the future as well as to recall the past and to blend the two into a reasonable view of the present [p. 69].

The importance of the self-concept for career development is stressed by Super, among others, who says "in expressing a vocational preference . . . , a person puts into occupational terminology his idea of the kind of person he is [Super et al., 1963, p. 1]." For him, the process of career development is essentially that of developing and implementing a self concept.

There is a good deal of theory and research to the effect that one's career is determined by the sort of person one is. The existentialists go a step further and state that the sort of person one is is also determined by one's career (Sartre, 1962). In any case, there is almost universal agreement that one needs a positive self-concept, and one must start early. That the school can facilitate this development is supported by Pratzner (1969) who concludes that "the maturity of an individual's self-concept tends to vary directly with active participation in group interaction and communication relevant to self [p. 36]."

II. Acquiring the Discipline of Work -- Erikson (1968) describes this stage in this way:

It is as if [the child] knows and his society knows that now that he is psychologically already a rudimentary parent, he must begin to be something of a worker and potential provider before becoming a biological parent. . . . He now learns to win recognition by producing things [p. 124].

The child has the interest and the ability to work. He needs opportunities to do so and reinforcement for doing so. He has developed a sense of agency: he knows he can master parts of his environment. At the next level, he will need a method for doing so. The discipline of work--persistence, organization, utilization of resources and so forth--gives him the method.

13. Identification with the Concept of Work as a Valued Institution --

The student moves from identification with workers to identification with the concept of work as he develops the ability to conceptualize. Havighurst (1968) indicates that at about this time the concept of working becomes an essential part of the ego ideal. Once the student has internalized this value, he proceeds to personalize it; work becomes a valued institution for him; he will work. If this value is not internalized, it becomes very difficult for him to achieve self-direction. The probability that he will work only because and when others want him to remains high. This in turn has a deleterious effect on his ability to achieve the discipline of work or a positive self-concept.

14. Increasing Knowledge about Workers -- At this stage, the student should expand his or her knowledge of workers beyond the home and neighborhood and beyond the limited, concrete knowledge of the primary level. Gysbers (1971) indicates that "the emphasis of program activities at this level should be on having students actively encounter the work world with its accompanying terminology and concepts [p. 8]." The most effective way for him to encounter this world is through direct and expanded contact with workers.

15. Increasing Interpersonal Skills -- Havighurst (1968) and Miller and Form (1951) stress the importance of peer relationship. As with all the tasks at this level, an increasing amount of sophistication is required of the student. Where at the primary level this task involved fairly simple behaviors such as parallel play and sharing, now the student must work effectively in more complex types of group activities. The skills at this age are primarily focused on same-sex peers, and remain fairly neuter in orientation even across sexes. After the onset of puberty the entire nature of relationships changes, but the individual's confidence in his ability to relate successfully, and thus to some extent, his actual ability, are in some degree dependent upon his earlier success or failure.

16. Increasing Ability to Present Oneself Objectively -- The basic task remains the same as at the primary level, but the complexity and consequently the risk involved increases. As with the task above, the more competent the individual becomes during this stage, the more likely he or she will be to withstand the sturm und drang of adolescence with his self-esteem intact.

17. Valuing Human Dignity -- Through this task the individual abstracts the respect he or she gained for specific people and their work to an appreciation of all people everywhere. He generalizes and internalizes the significance of people and their work. The next step is to personalize it. As he works through this task, he should gain an understanding of the interdependence of mankind. It is at this stage, according to Gysbers (1969) that values are formed, whether through incidental or intentional learning. Without a respect for and commitment to the worth of mankind

the individual can work only for his own gain, which is not always most productive or satisfying. Further, unless he truly values all men he cannot value himself.

Level 3 Junior High (J)

During the years from seventh through ninth grade the individual undergoes great changes physically, intellectually and socially. He must come to accept himself as an entirely different person outwardly, and, to some extent, inwardly. According to Erikson the major concern during this period is identity. He enters Piaget's formal operations stage, in which "he develops the capacity to operate on hypothetical propositions" (Sylwester, 1969)--he has learned to think logically and abstractly. His vocational development stage, says Hershenson (1968), is that of independence. Gysbers (1969) states that the

individual is able to cope with cultural and environmental demands, make internal interpretations of environmental transactions, and then generalize these interpretations to other situations [p. 4].

Concepts which have been acquired previously are used to build further concepts. Daws (1970) supports Erikson, saying "the dominating task of the adolescent years is achievement of a sense of personal identity."

J1. Clarification of a Self Concept -- Super states that "self-concepts begin to form prior to adolescence, become clearer in adolescence and are translated into occupational terms in adolescence [Super et al., 1963]." The individual is in Super's exploratory stage of vocational development, and explores self-attributes and dimensions of the world of work. He must reinterpret the self-concept he developed earlier in terms of his "new" self.

J2. Assumption of Responsibility for Vocational Planning -- At this level, usually for the first time, the student has a choice in some of his curricula. He combines his sense of agency with the discipline of work to assume responsibility, not just verbally, but in actual course selection. This task is highly interrelated with acquiring a sense of independence: if he allows others to choose his coursework, he remains dependent in at least this respect. Super's (1960) study of ninth grade boys indicates that acceptance of responsibility for planning is fairly widespread.

J3. Formulation of Tentative Career Goals -- These are tentative choices and great care must be taken to avoid pressuring a student into locking into a particular occupation at this point. This task is designed partially to narrow the range of the student's occupational interests, but it is primarily aimed at making him familiar with the factors and processes involved in choosing occupations. These hypotheses should be consonant with his own values, needs and abilities as identified in the clarification of his self-concept, yet they must remain open to unidentified and/or undeveloped interests and abilities. Further, as Simons (1966) points out,

the attack until now has been to examine the life process to attempt to explain the "why" of vocational choice. The existentialist is suggesting that one examine the career choice to explain the mystery of the life process.

The individual should be aware that there is some evidence that the career forms the self in much the same way that the self determines the career.

J4. Acquiring Knowledge of Educational and Vocational Resources -- Matheny (1969) defines one function of the middle school as helping students choose and locate appropriate curricula or jobs (p. 18). The emergence of what Piaget calls formal operations allows the adolescent to think about

his thoughts, to reason realistically about the future (Elkind, 1968).

This task is designed to give the student the information he needs to make realistic and openended choices. Vriend (1969) suggests

the likelihood that most individuals can fill any one of an inestimable number of unrelated occupational roles and are only limited in doing so by the exigencies of time, place, socio-economic circumstances and the effects of environmental conditioning including that which occurs in school [p. 384].

J6. Awareness of the Decision-Making Process -- Since the student will continually be making decisions, it is necessary to help him or her develop effective decision-making skills. Career development takes place within the framework of a changing society and rapidly changing occupations. Tiedeman (1961) states that "the compromise inherent in discovering and nourishing the area of congruence of person and society as expressed in an individual's behavior is effected within a set of decisions [p. 15]." Graff and McLean (1969) suggest that "vocational decision-making is an ongoing process of making choices, obtaining new information and experience, revising previous choices and making new choices [p. 573]." Because the student usually has his first opportunity to make decisions which will directly affect his career at the junior high level, it is essential that he become aware of the process involved.

J7. Acquiring a Sense of Independence -- Hershenson (1968) suggests that at this stage the adolescent's psychic and physical energy is primarily directed towards establishing independence. Allport (1955) speaks of a set of forces which "have their origin within the individual and emphasize self-expression through uniqueness and individuality [p. 444]." As the student's range of activities increases, his dependence on the home is weakened

(Miller and Form, 1951). This task is directly tied in with the preceding one. Having learned what he can do, the student must decide what he will do. He is learning to be independent of adult control and guidance (Hurlock, 1964). If he is successful in making his own decisions, his self-concept is strengthened and he is aided in establishing a separate identity.

Level 4 Senior High (S)

The tasks at this level demand that the student expand and refine upon the tasks of earlier levels. At this time the student determines to a large extent the course of his future. He must define the level of his educational aspirations and arrange his training accordingly. Many students enter the world of work for the first time. Gysbers (1969) states that

At this level the concepts which students hold about self, the work world and career preparation become internalized to the point where they form the basis for more specific generalizations concerning their career life identity [p. 9].

Achievement of these developmental tasks gives the student the tools with which to build a career.

Sl. Reality Testing of a Self Concept -- At this point the student needs to check his or her perceptions of abilities, aptitudes and other personal resources against external reality so that he can effectively determine the career options available to him and act accordingly. As Herr (1969) suggests, "One learns through experience and by socialization what kind of person he is, that of which he is capable, what he values [p. 179]."

S2. Awareness of Preferred Life Styles -- The high school student is expected to make a great many decisions which will strongly affect his or her future. It is extremely important that he consider all relevant factors including those relating to life style. In choosing an occupation, an individual chooses a way of life. Tyler states that "Individual differences as they show up in the world of work, are far more complex than early workers anticipated [Borow, 1964, p. 192]." Therefore, teachers must, as Hayes (1969) indicates,

provide the individual with the means of assessing whether a work role and its associated non-work roles are in harmony with the kinds of roles he would like to play and the way of life he aspires to, [and] facilitate the development of realistic expectations about his occupational role in terms which will enable him to test out its harmony with his self-concept [p. 17].

S3. Reformulation of Tentative Career Goals -- This task is an extension of the formulation of tentative career goals task at the junior high level. The student needs to incorporate changing interests, abilities, and values with increased knowledge of occupations and his own needs to formulate realistic career hypotheses. Care must be taken to avoid narrowing the occupational range too severely. As the student nears entry into the work world, a realistic array of options is vital.

S4. Increasing Knowledge of and Experience in Work Settings and Occupations -- The student at this level is capable of performing many kinds of work. Actual or simulated job experience will aid him or her in acquiring skills, responsibility and confidence in the role of worker, and aid him in testing his self-concept. Occupational information presented through the cluster concept approach, which is directed toward the prep-

aration of individuals with skills, knowledges and attitudes required for job entry into a family or cluster of occupations, is particularly appropriate at this level (Frantz, 1971). This approach allows students to narrow their range of occupations to those which they can realistically explore, but keeps options open.

S5. Acquiring Knowledge of Educational and Vocational Paths -- This task builds on the junior high level task acquiring knowledge of educational and vocational resources. In order to formulate realistic career hypotheses, the student must know what the educational and training requirements of tentatively considered choices are. In addition, this knowledge will help him or her to test the reality of his self-concept. This information can open up previously unconsidered options in his choice of careers.

S6. Clarification of the Decision-Making Process as Related to Self -- With the onset of the senior high years, the adolescent is required to make more and more career decisions. Herr states that choice-making is often more psychological than logical; thus it is important that the student understand the nature of decision making. Building from the junior high level task, awareness of the decision-making process, the student must personalize the process. Hunt (1967) suggests that "an individual tends to express his self-concept through his complex real-life decisions, such as in the case of vocational choice and decision [p. 51]." Achievement of this task helps create in the individual the ability to utilize his personal attributes to influence the nature of future choices rather than merely to adapt to external pressures (Morrill and Forrest, 1970, p. 300). Learning to make decisions and accept responsibility for them means that the student

comes closer to Allport's definition of becoming one's self: "to develop responsible independence and individuality [1955, p. 444]."

S7. Commitment with Tentativeness within a Changing World -- This task may be the most difficult and most necessary of all. It is related to the preceding task in that most real life decisions involve more than matching two sets of static data. We have a changing environment and the real decision is how to plan for change (Thompson, 1964). At the same time Erikson's focal issues of intimacy, generativity and ego integrity may all be summed up as commitment. Morrill and Forrest (1970) state that "both commitment and change are central for the individual who is to profit and grow personally from vocational experience and who is to be the key force in determining his future [p. 303]." Tiedeman (1967) indicates that understanding of the predicament inherent in tentativeness and commitment "emerges only haphazardly during life, if at all [p. 2]." He states that

The probability of such emergence is increased if (1) cognitive capacity . . . is sufficiently developed to enable the person to reflect upon action, (2) understanding and appreciation of goal and choosing predicaments is a primary educational goal, and (3) there is expectation that understanding of the predicament of tentativeness and commitment in goal pursuit and choice election facilitates decision-making during all of adult life [p. 4].

This is the developmental framework out of which the performance objectives have been created and enabling objectives suggested. They are offered as a stimulus for teachers to create their own career development curriculum programs to meet local needs. The following section specifies behaviors which characterize each vocational development task.

SECTION VII

THE CAREER DEVELOPMENT PROGRAM: SPECIFICATION OF BEHAVIORS WHICH CHARACTERIZE EACH VOCATIONAL DEVELOPMENT TASK

Level 1 Primary, Grades K-3

DT#P1 Awareness of Self

- PO#1 Describes how one perceives self as different from those around him/her.
 - EO#1 Identifies characteristics which describe one's physical appearance
 - EO#2 Identifies characteristics which describe one mentally and emotionally
- PO#2 Describes how health may affect work performance or be affected by it.
 - EO#1 Identifies ways in which poor physical or mental health may affect one's work performance now and in the future
 - EO#2 Lists ways in which an occupation can affect one's physical and mental health, positively and negatively
 - EO#3 Identifies physical and mental abilities required by different occupations
- PO#3 Demonstrates success in coping with new social and work roles.
 - EO#1 Identifies social and work roles which are new for him/her
 - EO#2 Describes how one is fulfilling a new work role
 - EO#3 Demonstrates adequate performance in a new social role

DT#P2 Acquiring a Sense of Control over One's Life

- PO#1 Defines work and demonstrates that he is a responsible worker.
 - EO#1 Constructs an oral or pictorial definition of work
 - EO#2 Lists work tasks he fulfills regularly and identifies reasons why he fulfills them
 - EO#3 Describes how his role as a student is like that of an adult worker

Code: DT = Developmental Task
PO = Performance Objective
EO = Enabling Objective

Levels: P = Primary
I = Intermediate
J = Junior High
S = Senior High

- PO#2 Describes how work can be a principal instrument for coping with and changing his own environment.
- EO#1 Identifies ways in which work he does at home affects his physical, social and emotional environment
 - EO#2 Describes how work he does in school can affect him socially and economically, now and in the future
 - EO#3 Identifies things he can do to make his environment more as he would like it to be
- PO#3 Identifies manipulative abilities that have relevance for work.
- EO#1 Demonstrates manipulative abilities in a variety of tasks
 - EO#2 Lists abilities he is in the process of acquiring
 - EO#3 Names occupations in which he could use his manipulative abilities
 - EO#4 Identifies ways in which the child is like workers he/she knows
 - EO#5 Identifies men and women who have entered and been successful in non-traditional occupations
- PO#4 Describes his own behavior in a work situation in terms of why he does or does not do more than the minimum required.
- EO#1 Identifies the requirements of a given work situation
 - EO#2 Lists reasons for and against doing more than the minimum in work situations
 - EO#3 Identifies reasons why he behaves as he does in any given work situation

DT#P3. Identification with Workers

- PO#1 Identifies ways in which he is like workers he knows.
- EO#1 Lists tasks he performs which are similar to those performed by workers he knows
 - EO#2 Names at least one characteristic which he shares with a worker
- PO#2 Describes self and the kind of person he wishes to become in light of his observations of worker models.
- EO#1 Lists characteristics of a worker model that he would like to acquire
 - EO#2 Identifies worker characteristics which he would like to acquire and describes how he might acquire them
- PO#3 Demonstrates an awareness that the effectiveness of workers he knows is closely related to the personal impression they make.
- EO#1 Identifies those students in his class who are effective workers and describes the general impression they make
 - EO#2 Identifies workers in his neighborhood who make either positive or negative impressions and describes their work effectiveness

DT/P4 Acquiring Knowledge about Workers

- PO#1 Describes the work of significant persons in his life.
 EO#1 Names the occupations held by his parents, close relative, neighbors, and others who are important to him
 EO#2 Identifies tasks which make up the occupation of several significant others
- PO#2 Observes and talks to various workers in the school and neighborhood to gain occupational awareness.
 EO#1 Lists the occupations represented in his school and identifies tasks performed in each
 EO#2 Observes workers in his neighborhood and describes the tasks they perform
- PO#3 Increases the range of workers about whom one has knowledge.
 EO#1 Identifies workers who provide services to his home and describes their functions
 EO#2 Names occupations whose function he doesn't know and interviews workers in those fields
 EO#3 Identifies occupations which have been created in the last ten years
- PO#4 Asks significant others what skills they need in their jobs.
 EO#1 Lists skills which correspond with the occupations of significant others

DT/P5 Acquiring Interpersonal Skills

- PO#1 Performs in a given work situation in a manner which indicates he understands that work effectiveness depends not just on proficiency but on quality of interpersonal relations as well.
 EO#1 Demonstrates in a group task that completion of the task depends on cooperation as well as individual proficiency
 EO#2 Describes the effect of pleasant or unpleasant relationships on his ability to work effectively
- PO#2 Contributes positively to group effort in a work situation by demonstrating ability to both compromise and exercise influence in the achievement of group goals.
 EO#1 Lists group goals in a given situation and identifies reasons why he may have to compromise to reach those goals
 EO#2 Describes how his influence might help to achieve group goals
 EO#3 Identifies advantages and disadvantages of compromise and influence in a given situation
- PO#3 Describes how participation in individual and group activities will aid his development or enhance a work-related skill.
 EO#1 Describes how working with others can help him develop a work-related skill

- EO#2 Identifies similarities in his relations with other students and an adult worker's relations with co-workers

DT#P6 Ability to Present Oneself Objectively

- PO#1 Demonstrates ability to use constructively success or failure in a work situation.
- EO#1 Identifies factors which contribute to success or failure in a work situation
 - EO#2 Describes his performance in a given situation as successful or unsuccessful and asks for constructive criticism
 - EO#3 Describes knowledge gained in failure to complete a task which might not otherwise be gained
- PO#2 Demonstrates the ability to depend upon others and to be depended upon in the work environment.
- EO#1 Identifies ways in which he is dependent upon the work of others
 - EO#2 Identifies ways in which others depend on work he does
 - EO#3 Describes the advantages and disadvantages of depending on others and being depended upon
- PO#3 Shows a genuine concern for co-workers and expresses a shared responsibility for success or failure of the work group.
- EO#1 Describes how the performance of any member of a work group can affect the group's performance
 - EO#2 Identifies the effects of his actions on other workers and describes his responsibilities to them because of these effects
 - EO#3 Describes how the activities of members in different families can affect the family unit

DT#P7 Acquiring Respect for Other People and the Work They Do

- PO#1 Describes the contribution of many different workers to society
- EO#1 Lists the contribution of workers at various socioeconomic levels and identifies reasons why each is important
 - EO#2 Describes the interdependence of the people in his school and neighborhood: how each of them needs the others
- PO#2 Describes how the work of women is as important as the work of men.
- EO#1 Identifies the contribution women make to life
 - EO#2 Describes the changing role of women in the world of work
 - EO#3 Describes how the contribution of individuals both inside and outside the home is important

Level 2 Intermediate, Grades 4-6DT#11 Developing a Positive Self Concept

- PO#1 Describes how he and others perceive his strengths.
 - EO#1 Identifies positive characteristics which describe him
 - EO#2 Describes positive characteristics which others see in him
 - EO#3 Identifies the characteristics he and others agree he possesses and those on which they do not agree and lists possible reasons for their disagreement

- PO#2 Describes how one perceives himself in terms of interests, abilities, values and goals.
 - EO#1 Classifies a list of terms as interests, abilities, values and goals
 - EO#2 Selects from a list his own interests abilities, values and goals
 - EO#3 Describes ways in which one sees self as similar to or different from workers in occupations which traditionally have been stereotyped by sex
 - EO#4 Identifies own values as they relate to work situations
 - EO#5 Identifies values of workers in occupations which traditionally have been stereotyped by sex

- PO#3 Identifies his own values as they relate to work situations.
 - EO#1 States how, if at all, his behavior would differ from that of a worker model in a value conflict situation
 - EO#2 Identifies values he holds and lists occupations through which these values are promoted
 - EO#3 Identifies occupations in which it would be difficult to maintain the values one now holds

- PO#4 Describes work as valuable in terms of its intrinsic satisfactions.
 - EO#1 Identifies satisfactions in his work as a student
 - EO#2 Lists abilities which he enjoys using and identifies occupations in which he could use those abilities
 - EO#3 Identifies satisfactions relating to interests and values which he can gain through work

- PO#5 Describes ways in which one can express self through work.
 - EO#1 Identifies personal characteristics which one values and describes his use of those characteristics in school
 - EO#2 Lists occupations through which he could express his interests, values and abilities

DT#12 Acquiring the Discipline of Work

- PO#1 Demonstrates effective work habits by utilizing communication skills when giving or evaluating instructions.
 - EO#1 Instructs another student or group of students in the performance of a simple task

- EO#2 Follows instructions to perform a simple task
- EO#3 Asks questions which make completion of a task possible
- PO#2 Identifies those factors taken into consideration by an employer when choosing from an abundance of job applicants.
 - EO#1 Identifies characteristics which an employer would consider at a job interview
 - EO#2 Identifies qualifications an employer would consider important
- PO#3 Budgets his time effectively by managing his leisure, work and home time in ways that enable him to achieve individual goals.
 - EO#1 Identifies an individual goal and constructs a schedule of leisure, work and home time which will enable him to meet that goal
 - EO#2 Identifies individual goals which may conflict in terms of the time they consume and describes alternative schedules which allow him various ways of resolving the conflict
- PO#4 Demonstrates a personal involvement in the work task and situation, responding positively to problems.
 - EO#1 Selects a work task, identifies the problems involved in it, and describes means of coping with the problems
 - EO#2 In a given task selects a positive means of solving a problem
- PO#5 Demonstrates ability to organize self and situation in order to accomplish a variety of tasks.
 - EO#1 Sets priorities for tasks to be done and allocates time
 - EO#2 Assesses energy and time required to complete a series of tasks within a given period and checks it out

DT#I3 Identification with the Concept of Work as a Valued Institution

- PO#1 Explains how the things learned in work make leisure time more enjoyable.
 - EO#1 Describes how work and leisure time pursuits are related
 - EO#2 Identifies skills one uses in school which make leisure time enjoyable
 - EO#3 Lists work attitudes and interests which extend appropriately to leisure time
- PO#2 Identifies and explores two or more broad occupational areas which may offer satisfying work activity.
 - EO#1 Describes the satisfactions significant others gain from their occupation
 - EO#2 Identifies the contribution of occupational areas to society
- PO#3 Describes how his interests relate to broad occupational areas.
 - EO#1 Identifies work oriented interests in the home, school and community

EO#2 Identifies occupational areas which relate to home, school and community work-oriented interests

PO#4 Identifies the value he places on personal endeavor and achievement as compared to societal values.

EO#1 Identifies personal values placed on work and achievement

EO#2 Identifies home and societal values placed on work and achievement

EO#3 Describes the differences between the real and ideal in our work value system

EO#4 Identifies how and why personal values change as a result of societal values

EO#5 Identifies men and women with different work values

DT#I4 Increasing Knowledge about Workers

PO#1 Identifies and utilizes non-technical resources available for gathering information about occupations.

EO#1 Describes human resources available to him in the school and community

EO#2 Constructs a sample interview questionnaire for gaining occupational information

EO#3 Lists resources available to him in the library, classroom and home

PO#2 Studies workers in various occupations to learn their satisfactions and dissatisfactions.

EO#1 Interviews workers in various occupations to learn their satisfactions and dissatisfactions

EO#2 Interviews workers in the same occupations and describes similarities and differences in their satisfactions, interests, attitudes and skills

EO#3 Identifies men and women in new or unusual occupations which one would like to learn more about

PO#3 Identifies the sources of power and authority in work situations and describes their effect on the worker.

EO#1 Identifies a source of power and authority in the classroom and describes its effect on him

EO#2 Identifies several sources of power and authority in a work task

EO#3 Describes a situation in which he is a source of power and authority and describes his effect on others

PO#4 Identifies the reasons why many women will need the stimulation and rewards of a work role in addition to a family role.

EO#1 Identifies life patterns of men and women which are different from the traditional societal one

EO#2 Identifies family patterns in which men and women have equal roles in work and in home management

- EO#3 Describes the changing roles of women in the labor force
- EO#4 Lists the advantages and disadvantages of mothers working outside the home
- EO#5 Examines satisfactions of women who are not working outside the home
- EO#6 Examines satisfactions of women who are working outside the home

DT#I5 Increasing Interpersonal Skills

- PO#1 Identifies personal characteristics in his relations with other people as they are relevant to work (e.g., persuading, cooperating, etc.).
 - EO#1 Describes his mental, physical and emotional characteristics which are apparent in work situations
 - EO#2 Identifies characteristics in his relations with others which seem to facilitate working with them
 - EO#3 Lists characteristics which seem to hinder his interpersonal relations and describes how he might change them
- PO#2 Describes how a person's welfare is dependent upon the well-being of all people in society.
 - EO#1 Identifies factors in personal well being
 - EO#2 Identifies factors of societal well being, including wages earned in work
 - EO#3 Describes the effect of local and national economy on individual well being
- PO#3 Identifies social, political and service organizations available to him and describes how he can contribute to the community and school through them.
 - EO#1 Lists the local service clubs and describes their contribution to the community
 - EO#2 Identifies the political organizations in the community and describes how their policies and actions affect occupations
 - EO#3 Describes the pressures to join organizations because of work affiliations
 - EO#4 Identifies clubs, organizations, and activities within the present and future school setting that might provide work-related experiences
- PO#4 Displays an awareness of the dynamics of group behavior by successfully functioning as a contributing member of a task oriented group.
 - EO#1 Identifies ways in which his individual experiences will benefit the work group
 - EO#2 Demonstrates in group interaction the ability to facilitate task performance through teamwork

DT#I6 Increasing Ability to Present Oneself Objectively

- PO#1 Copes with authority exercised by others in the work environment in ways which lead to effective achievement of the task.
 - EO#1 Locates and identifies authority in his environment
 - EO#2 Describes how an authority can facilitate completion of his own task
 - EO#3 Lists ways in which he can complete his tasks with the help of or in spite of authority exercised by others
- PO#2 Elicits and considers suggestions and evaluations regarding a given work performance.
 - EO#1 Selects and performs a task, asking the teacher for suggestions
 - EO#2 Describes his performance of a work task to his peers; identifies and utilizes constructive suggestions
- PO#3 Describes his obligation as an interdependent person in a work oriented community.
 - EO#1 Selects an occupation and describes what would happen to society if that occupation's functions were not performed
 - EO#2 Describes how he and his family are interdependent
 - EO#3 Identifies situations in which his failure to perform makes it impossible for others to fulfill their tasks

DT#I7 Valuing Human Dignity

- PO#1 Describes how he can contribute to society now.
 - EO#1 Identifies a variety of ways in which individuals can contribute to the community
 - EO#2 Identifies social and economic needs of his own community
 - EO#3 Lists ways in which he can contribute towards fulfilling the needs of his community
- PO#2 Describes the social worth of work by identifying the contribution of a wide range of various occupations to the well being of society.
 - EO#1 Lists workers who directly affect his life every day
 - EO#2 Identifies reasons why some occupations disappear while others are created
 - EO#3 Constructs a definition of the concept "dignity in all work"
- PO#3 Describes how work in America can help to overcome the social problems which confront mankind today.
 - EO#1 Identifies social problems that are present in society today
 - EO#2 Describes how work has helped to overcome social problems in the past
 - EO#3 Identifies occupations which aggravate and which help resolve social problems
 - EO#4 Describes what he does or can do through his occupation as a student to aggravate or alleviate social problems

- EO#5 Identifies occupations in which women and men may help solve a major social problem.
- EO#6 Identifies community needs which might be met through creation of new jobs

Level 3 - Junior High, Grades 7-9

DT#J1 Clarification of a Self Concept

- PO#1 Describes the relevance of his aptitudes and abilities for broad occupational areas.
 - EO#1 Identifies his abilities and lists occupations in which they could be utilized
 - EO#2 Selects broad occupational areas and identifies abilities required in each area
 - EO#3 Describes how several of his abilities could be utilized in an occupation
 - EO#4 Describes how he could develop his aptitudes for use in several occupations
- PO#2 Describes own values as they relate to occupations, work situations and personal work behavior.
 - EO#1 Lists values which are congruent and incongruent with one's preferred occupations
 - EO#2 Describes how one's social roles are influenced by the work one does and how well one does it
 - EO#3 Identifies one's personal values by participating in activities which make one aware of self
 - EO#4 Identifies compromises a man or woman may have to make in choosing to pursue an occupation
 - EO#5 Identifies ways in which one performs work roles at home that satisfy needs of the family
- PO#3 Demonstrates sensitivity to the needs of co-workers and supervisors and describes how he is a significant person in the satisfaction of these needs.
 - EO#1 Describes ways in which his behavior at school and at home affects his immediate family
 - EO#2 Identifies requirements of students and teachers in several situations and describes how he meets those requirements
 - EO#3 Identifies ways in which his behavior in a preferred occupation could help his co-workers and supervisors, and ways in which it could hinder them
- PO#4 Predicts and gives supporting evidence for the likelihood of one's achieving one's occupational goals.
 - EO#1 Describes physical, mental, social and financial requirements for reaching his occupational goals

- EO#2 Identifies self-characteristics which may help or hinder achievement of his occupational goals
- EO#3 Identifies societal barriers which may hinder achievement of one's occupational goals
- EO#4 Identifies ways in which different work and family patterns may require different kinds and amounts of energy, participation, motivation, and talent

DI#J2 Assumption of Responsibility for Vocational Planning

- PO#1 Describes how the management of personal resources (talents, time, money) affects one's way of life and achievement of life goals.
- EO#1 Identifies his actual and potential personal resources
- EO#2 Describes his present life goals and relates his personal resources to these goals
- EO#3 Identifies several different ways of managing his personal resources which may lead to achievement of his life goals
- EO#4 Relates personal abilities, energies, goals, motivations, tastes, and circumstances to a variety of life patterns

- PO#2 Demonstrates a commitment to the idea that one should have a plan for one's educational-vocational life.
- EO#1 Identifies various sources of educational-vocational information and describes their relevance for his life
- EO#2 Formulates a tentative plan for his educational-vocational life based upon sound information and selective use of resources
- EO#3 Describes implications of a tentative plan for other aspects of life (marriage, family, leisure, community, etc.)

- PO#3 Plans current school experience so that it fits into the pursuit of one's occupational goals.
- EO#1 Identifies academic courses whose completion may aid in the achievement of occupational goals
- EO#2 Describes how one's behavior in both academic and non-academic aspects of the school experience can affect achievement of occupational goals
- EO#3 Describes vocational and avocational implications of subjects he or she is taking
- EO#4 Acquires experience in a variety of tasks, including those typically stereotyped by one's sex

DI#J3 Formulation of Tentative Career Goals

- PO#1 Identifies personal needs and sources of satisfaction which one should consider in planning a career.
- EO#1 Describes the relevance of one's interests for broad occupational areas
- EO#2 Identifies those factors which will be significant for one-self in the selection of a career

EO#3 Identifies from a variety of life styles those which at present appear to be most compatible with the kind of person one sees oneself to be

EO#4 Identifies personal goals or values which might be satisfied through a combination of work, community, social, and family roles

PO#2 Formulates a tentative educational and training plan to prepare oneself for a given occupational field or preferred vocation:

EO#1 Identifies an occupational field or preferred vocation and delineates steps necessary for entrance to that field or vocation

EO#2 Identifies and seeks information about alternative occupations for which training, experience and interest requirements are sufficiently similar to those of preferred occupations that they may serve as alternative career possibilities

DT#J4 Acquiring Knowledge of Occupations and Work Settings

PO#1 Increases the range of occupations of which one has knowledge and examines their functions and requirements.

EO#1 Makes occupational observations in various work settings as an essential part of one's introduction to and exploration into the work culture

EO#2 Identifies the multiplicity of interests that may be satisfied in two or more broad occupational areas

EO#3 Identifies occupations which have been created in the last decade to help solve society's problems

EO#4 Identifies occupational areas increasingly open to both men and women

PO#2 Gathers information concerning the factors necessary for success on the job.

EO#1 Debates the benefits of conforming behavior as opposed to individual initiative within the work organization

EO#2 Identifies various sources of information on job success and describes how he can utilize them

EO#3 Identifies social, political, economic and educational factors which may affect success in one's preferred occupations

EO#4 Identifies discriminatory practices in employment which may affect success in preferred occupations

PO#3 Describes those factors beyond one's control which operate within the modern work world to stimulate or retard vocational opportunities.

EO#1 Identifies events of international significance which affect vocational opportunities (wars, Sputnik, depressions)

EO#2 Describes the extent to which business and unions operate either on the basis of private interest or social responsibility

- EO#3 Describes sex stereotypes which may limit the opportunities for men and women in certain occupations
- EO#4 Describes special problems of minorities and women in relation to power and authority

DT#J5 Acquiring Knowledge of Educational and Vocational Resources

- PO#1 Identifies and utilizes those resources available for gathering information about occupational characteristics.
 - EO#1 Describes resources available to one within the school for occupational information
 - EO#2 Lists community resources for educational and occupational information and describes how one can utilize them
 - EO#3 Identifies individuals in nontraditional occupations or work roles who might be an information resource or role model
- PO#2 Identifies and utilizes appropriate criteria for evaluating occupational information.
 - EO#1 Describes occupational resources available to one in terms of their accuracy, recency, and completeness
 - EO#2 Identifies factors which may contribute to misinformation about occupations (occupational stereotypes, societal status rankings, incomplete research, outdated facts)
 - EO#3 Identifies attitudes of adults (parents, teachers, counselors, relatives, etc.) which influence occupational opportunity
- PO#3 Studies relationship between education and occupation.
 - EO#1 Describes a strategy for career decision-making
 - EO#2 Identifies possible consequences of decisions facing one regarding senior high program
 - EO#3 Identifies kind and amount of training needed for preferred occupational areas

DT#J6 Awareness of the Decision-Making Process

- PO#1 Describes one's current life context as it relates to vocational decisions.
 - EO#1 Constructs a definition of a value and describes the valuing process
 - EO#2 Identifies personal values, personal and family aspirations and family background factors which may influence his/her vocational decisions
 - EO#3 Identifies the vocational and educational options available to him and describes their feasibility
 - EO#4 Projects those factors which may inhibit or deter his/her educational or vocational progress
- PO#2 Describes how the expectations of others affect his career plans.
 - EO#1 Identifies significant others in his life and lists expectations they have of him

- EO#2 Describes how his present behavior is affected by the expectations of others
- EO#3 Identifies ways in which his career behavior affects the lives of those around him (parents, spouse, etc.)
- PO#3 Projects decisions he will face in the future and describes means of facing them.
 - EO#1 Identifies decisions he must make prior to entering an occupation and lists options available to him
 - EO#2 Identifies several ethical questions which confront workers in his preferred occupation(s) and describes the ways in which these people have formed acceptable solutions

DT#J7 Acquiring a Sense of Independence

- PO#1 Identifies those characteristics which make him or her a unique individual.
 - EO#1 Describes one's physical, mental and social abilities and aptitudes
 - EO#2 Identifies a wide range of social organizations and describes one's own potential as a contributing member of each
 - EO#3 Identifies personal needs and values in relation to unique occupational preferences
- PO#2 Selects from the advice given by significant others that which one can utilize in planning a career.
 - EO#1 Identifies factors which affect the advice given by others (their own needs, misinformation)
 - EO#2 Describes similarities and differences between one's own needs and abilities and the needs and abilities of those giving one advice
 - EO#3 Identifies possible conflicts in selecting occupational goals different from the expectations of significant others
 - EO#4 Ranks own goal priorities in relation to goals of significant others for him or her
- PO#3 Demonstrates an ability to evaluate and cope with varying expectations so that he may satisfactorily perform in a given work situation.
 - EO#1 Describes the motivations of supervisors and co-workers in the work environment who may hold varying expectations regarding his present work performance
 - EO#2 Ranks varying expectations according to their importance in successful completion of the work task and according to their importance in making the work situation a pleasant one

Level 4 Senior High, Grades 10-12DT#S1 Reality Testing of a Self Concept

- PO#1 Describes his own abilities, aptitudes, and other personal resources in relation to the requirements for preferred occupations.
 - EO#1 Identifies both actual and potential personal resources
 - EO#2 Describes the physical, mental, social, economic and educational requirements of his preferred occupations
- PO#2 Describes the social roles and social demands one must fulfill for successful performance in preferred occupation(s).
 - EO#1 Identifies the value one places on personal endeavor and achievement compared to societal values
 - EO#2 Describes the roles of various workers in one's preferred occupation(s) noting the similarities and differences in how they perform and how successful they are
 - EO#3 Describes the multiple roles one may fill and ways in which they affect and may be affected by occupational preference
- PO#3 Demonstrates success in coping with new social and work roles.
 - EO#1 Copes with authority exercised by others in ways which lead to effective realization of his own personal goals
 - EO#2 Handles his own position of authority in the work environment in ways which lead to effective realization of personal goals and development of others

DT#S2 Awareness of Preferred Life Styles

- PO#1 Makes explicit one's own life style needs and priorities at this point in time.
 - EO#1 Describes how self characteristics relate to the responsibilities and tasks of preferred occupation(s)
 - EO#2 Identifies life style needs which may be in conflict with the demands of preferred occupation(s) and assigns them a priority ranking
 - EO#3 Identifies several life patterns which might be followed by men and women
 - EO#4 Discusses the significance of each in regard to the personal development and family life of men and women
 - EO#5 Identifies from a variety of life styles those which seem most compatible with personal characteristics and needs
 - EO#6 Projects consequences of preferred life style on family, leisure, and significant others
- PO#2 Describes the ways in which one's career choice may affect future life style.
 - EO#1 Describes life styles and ways of living associated with a few occupations in the broad occupational area or areas of his choice

- EO#2 Describes how different occupations and work settings vary in the degree of personal freedom to define one's role and activities
- EO#3 Explains how a vocation may contribute to a balanced and productive life

DT#S3 Reformulation of Tentative Career Goals

- PO#1 Studies and projects a career plan that will enable one to pursue an occupation which will fulfill the personal needs and values one considers most important.
- EO#1 Describes how the image one holds of a preferred occupation relates to information one receives through occupational literature and real contacts with workers
- EO#2 Seeks information about the way one's preferred occupation(s) may affect life style
- EO#3 Describes power and authority relationships characteristic of preferred work setting and occupation
- EO#4 Identifies 3 work environments compatible with his/her needs
- PO#2 Describes how one's preferred occupation can be a source of satisfaction and human expression of self.
- EO#1 Describes the ways in which one's preferred work contributes to the welfare of society
- EO#2 Identifies personal qualities which can be developed and expressed through one's work

DT#S4 Increasing Knowledge of and Experience in Work Settings and Occupations

- PO#1 Describes the interdependency of all workers and work talents in contributing to the well-being of the community.
- EO#1 Describes the roles required of workers in various occupations and assesses the compromises involved in performing these roles
- EO#2 Investigates and discusses the ways in which management, labor and government interact to influence work life
- EO#3 Demonstrates the ability to depend on others and to be depended upon in the work environment
- PO#2 Describes work as a principal instrument for coping with and changing one's own environment.
- EO#1 Describes changes within the modern work society which have affected the traditional division of labor by sex
- EO#2 Describes how one can work for social change within one's preferred occupation(s)
- EO#3 Identifies outcomes of one's work which assist one in coping with the environment
- EO#4 Identifies discriminatory practices in the work environment which one might help to change

- EO#5 Describes women's changing roles in the labor force
- EO#6 Lists five career-family or life style patterns open to men and women
- EO#7 Examines labor force data on women and men in different occupations

PO#3 Selects potential employers and locates suitable job opportunities.

EO#1 Describes the roles required of workers in one's preferred occupations and identifies compromises one would have to make to fulfill those roles

EO#2 Elicits information about what persons with experience and training in one's preferred occupations are receiving as compensation

PO#4 Describes how the work contribution of women is as socially significant as that of men.

EO#1 Participates in and observes situations in which women are found in roles other than traditional ones

EO#2 Gathers information concerning vocational opportunities for women in various areas of work

DT#S5 Acquiring Knowledge of Educational and Vocational Paths

PO#1 Describes the quality of education, job training, or work experience necessary in preparation for a preferred occupation.

EO#1 Seeks information concerning the content and requirements of educational and training courses that may facilitate occupational goals

EO#2 Identifies sources of financial aid for further education or training and the requirements or restrictions of specific assistance

EO#3 Interprets census and occupational outlook data and draws conclusions about employment trends in various occupations

EO#4 Identifies the various job ladder or career progression possibilities of a few jobs in several broad occupational areas

PO#2 Seeks information about what skills are needed to get a job.

EO#1 Identifies skills necessary for success in preferred occupation(s)

EO#2 Identifies and practices appropriate behavior for an employment interview

EO#3 Identifies information that should be included in a resume and/or application form

DT#S6 Clarification of the Decision-Making Process as Related to Self

PO#1 Projects and describes the factors which may influence one's career decisions.

EO#1 Compares immediate rewards with long-term rewards in several occupations

- EO#2 Describes potential economic opportunities in relation to personal satisfactions in considering different occupations
- EO#3 Identifies alternatives and possible outcomes of each
- EO#4 Projects the potential satisfactions of preferred occupations in relation to priority values and needs
- EO#5 Identifies alternate or "back-up" occupations if first preferences do not work out

PO#2 Accepts responsibility for making occupational choices and moving towards occupational goals.

- EO#1 Predicts the effect one's career decisions may have upon significant others
- EO#2 Identifies the personal compromises one may have to make in order to attain one's preferred occupational goals

DT#S7 Commitment with Tentativeness within a Changing World

PO#1 Identifies the changing meanings of work over time and between cultures.

- EO#1 Examines social and economic trends for their potential effect upon broad occupational fields and upon opportunities within preferred occupations
- EO#2 Describes how a person's career may be a means to effect social change
- EO#3 Examines different career patterns of women and men and their potential effect on family patterns and life styles
- EO#4 Compares the work ethic at the turn of the century with contemporary work ethic(s)

PO#2 Makes career plans which take into account the fact that technology and automation influence change and may create the need for transferable skills.

- EO#1 Describes the extent to which technological change may affect the employment opportunities and role requirements of preferred occupation(s)
- EO#2 Identifies skills or knowledge utilized in the preferred occupation(s) which may transfer to another occupation

PO#3 Identifies the possible sources of the attitudes toward women held by oneself and the society in which one lives.

- EO#1 Reads and discusses relevant literature dealing with women, their traditional roles, and their place in the world of work
- EO#2 Discovers elements within our culture which have contributed to the continuance of the traditional view of women
- EO#3 Investigates the opinions that contemporary women hold of themselves and their place in the world of work

- PO#4 Identifies the changing meanings of work in one's life in relation to other values.
- EO#1 Examines the extent to which one accepts the work values and career patterns of the predominant culture
- EO#2 Describes the ways in which changing work and leisure values may bring about career shifts in adults

REFERENCES

- Antholz, Mary Bee. Conceptualization of a model career development program, K-12. Unpublished master's paper, College of Education, University of Minnesota, 1972.
- AVA-NVGA Commission on Career Guidance and Vocational Education. Position paper on career development. 1973 (mimeo).
- Bailey, Larry J. A Curriculum Model for Facilitating Career Development. Career Development for Children Project. Carbondale: Southern Illinois University, School of Technology, 1971.
- Borow, Henry (ed.). Man in a World at Work. Boston: Houghton Mifflin, 1964.
- Bottoms, James E., et al. Career Education Resource Guide. Washington: General Learning Corporation, 1972.
- Crites, John O. Career Maturity Inventory. San Francisco: McGraw-Hill, 1972.
- _____. Vocational Psychology. New York: McGraw-Hill, 1969.
- Daws, Peter. Occupational information and the self-defining process. The Vocational Aspect of Education, 52:71-79, 1970.
- Distributive Educators and Counselors Enrolled in a Pilot Training Project Focusing on Occupational Experience and Career Development. Suggested Teaching-Learning Approaches for Career Development in the Curriculum. Minneapolis: College of Education, University of Minnesota, 1968.
- Douvan, Elizabeth. The Adolescent Experience. Institute for Social Science Research. Ann Arbor: University of Michigan, 1967.
- Drier, Harry N., Jr., et al. Inservice preparation: key to career education delivery. Paper presented at the Sixth Annual National Vocational and Technical Teacher Education Seminar, The Center for Vocational and Technical Education, The Ohio State University, Columbus, Ohio, October 23-26, 1972b.
- Dworkin, Edward and Walz, Garry. An evaluation model for guidance. In D. Cook (ed.), Guidance in Education for Revolution. Boston: Allyn and Bacon, 1971.
- Elkind, David. Giant in the nursery: Jean Piaget. Education Digest, 34: 19-23, 1968.

- EPDA Institute. Career Development and the Elementary School Curriculum. Minneapolis: Department of Counseling Psychology and Department of Distributive Education, University of Minnesota, Summer, 1971 (mimeo).
- Erikson, Erik. Identity: Youth and Crisis. New York: Norton, 1968.
- Feldman, M. Public education and manpower development. Paper presented at Conference on Curriculum and Teaching in Depressed Areas, Columbia University, June 24, 1967 (Ford Foundation Reprint).
- Flanagan, John D. and Jung, Steven M. Progress in Education: A Sample Survey (1960-1970). Palo Alto: American Institutes for Research, 1971.
- Flavell, J. H. The Developmental Psychology of Jean Piaget. Princeton: D. Van Nostrand, 1963.
- Frantz, Nevin R. The development of a curriculum for a cluster concept approach to vocational education. Journal of Industrial Teacher Education, 8:17-24, 1971.
- Ginzberg, Eli; Ginsburg, Sol W.; Axelrod, Sidney; and Herma, John S. Occupational Choice: An Approach to a General Theory. New York: Columbia University Press, 1951.
- Glasser, William. Schools without Failure. New York: Harper and Row, 1969.
- Goldhammer, Keith and Taylor, Robert E. Career Education: Perspective and Promise. Columbus: Charles E. Merrill Publishing Company, 1972.
- Goodlad, J. Directions of curriculum change. In E. Short and G. Marconit (eds.), Contemporary Thought on Public School Curriculum. Dubuque: Wm. C. Brown Company, 1968.
- Goodlad, John I., and Richter, Maurice N. Jr. The Development of a Conceptual System for Dealing with Problems of Curriculum and Instruction. Cooperative Research Project No. 454. Los Angeles: University of California and Institute for Development of Educational Activities, 1966.
- Gorman, Anna M., and Clark, Joseph F. (eds.). Implications of Career Education for Teachers' Preparation. Proceedings of the Sixth Annual National Vocational and Technical Teacher Education Seminar, October 23-26, 1972. The Center for Vocational and Technical Education, The Ohio State University, March, 1973.
- Graff, Robert W., and Maclean, G. Donald. Evaluating educational-vocational counseling: a model for change. Personnel and Guidance Journal, 48:568-574, 1969.

Gysbers, Norman and Moore, Earl J. Elements of a model for promoting career development in elementary and junior high school. Paper presented at the National Conference on Exemplary Programs and Projects, Atlanta, Georgia, March, 1969.

_____. Career development: a new focus. Educational Leadership, 30: 257-260, December, 1972a.

_____. Career guidance: program content and staff responsibilities. San Diego: Department of Education, San Diego County, May, 1972b.

Hansen, Lorraine S. Learning Module for Preservice Teachers in Career Development/Career Education. Minneapolis: College of Education, University of Minnesota, December, 1971 (mimeo).

_____. Implications of career education for teacher and counselor preparation. Paper presented at the 1972 College Entrance Examination Board Annual Meeting, St. Louis, Missouri, October 30, 1972a (mimeo).

_____. New counselor role in career development: teacher consultation and curriculum intervention. Paper and cassette prepared for the American Personnel and Guidance Association New Counseling Media Series, Counseling Today and Tomorrow. Washington, February 1, 1972b.

_____. Social aspects and considerations of career education. A paper presented at the USOE Institutes on Curriculum Personnel Development Department of Vocational Education, Colorado State University, Fort Collins, Colorado; Washington, D.C.; and Auburn, Alabama, 1972-73.

_____. Teachers' responsibilities in career education. A paper prepared for Information Analysis Unit: The Ohio Center for Vocational-Technical Education, The Ohio State University, Columbus, Ohio, April 1973.

Hansen, Lorraine S., and Borow, Henry. Toward effective practice: emerging models and programs. Career Guidance for a New Age. Edited by H. Borow. New York: Houghton Mifflin, 1973.

Harwood, Charles, et al. An Elementary Guide in Career Development. Roseville, MN: Roseville Area Schools Career Development Project, K-6, December, 1972.

Havelock, Ronald. A Guide to Innovation in Education. Center for Research in Utilization of Scientific Knowledge. Ann Arbor: Institute for Social Research, University of Michigan, 1970.

Havighurst, Robert. Developmental Tasks and Education. New York: Longman, Green and Company, 1952.

_____. The middle school child in contemporary society. Theory into Practice, 7:120-122, 1968.

Hayes, John. Occupational choice and the perception of occupational roles. Occupational Psychology, 43:15-22, 1969.

Herr, Edwin L. Guidance and vocational aspects of education: some considerations. Vocational Guidance Quarterly, 17:178-184, 1969.

_____. Curriculum considerations in career development programs, K-12. Pennsylvania State University, 1971 (mimeo).

Herr, Edwin and Cramer, Stanley. Vocational Guidance and Career Development in the Schools: Toward a Systems Approach. New York: Houghton Mifflin, 1972.

Hershenson, David B. A life stage vocational development system. Journal of Counseling Psychology, 15:23-30, 1968.

Holt, John. How Children Fail. New York: Delta, 1964.

Hoyt, Kenneth B., et al. Career Education. What It Is and How To Do It. Salt Lake City: Olympus Publishing Company, 1972.

Hunt, R. A. Self and other semantic concepts in relation to choice of a vocation. Journal of Applied Psychology, 51:242-246, 1967.

Hurlock, Elizabeth B. Child Development. New York: McGraw Hill, 1956.

Katz, M. Decisions and Values. New York: College Entrance Examination Board, 1963.

_____. The name and nature of vocational guidance. In H. Borow (ed.) Career Guidance for a New Age. Boston: Houghton Mifflin, 1973.

Keller, Louise J. Career Education Inservice Training Guide. Career Programs. Morristown, N.J.: General Learning Corporation, 1972a.

_____. Preservice preparation of teachers for career education: Paper presented at the Sixth Annual National Vocational and Technical Education Seminar, The Center for Vocational and Technical Education, The Ohio State University, Columbus, Ohio, October 23-26, 1972b.

Kohl, Herbert R. Teaching the Unteachable. New York: New York Review, 1967.

Kokaska, Charles; Lazar, Alfred L.; and Schmidt, Alfred. Vocational preparation at the elementary level. Teaching the Exceptional Child, 2:63-66, 1970.

Kroll, Arthur M.; Dinklage, Lillian B.; Lee, Jennifer; Morley, Eileen; and Wilson, Eugene H. Career Development. Growth and Crisis. New York: John Wiley & Sons, 1970.

- Levenstein, A. The meaning of work in an age of affluence. In H. Borow (ed.), Career Guidance for a New Age. Boston: Houghton Mifflin, 1973.
- Mager, Robert F. Preparing Instructional Objectives. Palo Alto: Fearon Publishers, 1962.
- Marland, Sidney P., Jr. Career education now. In K. Goldhammer and R. Taylor (eds.), Career Education: Perspective and Promise. Columbus: Charles Merrill, 1972a.
- _____. The school's role in career development. Educational Leadership, 30:203-205, December, 1972.
- Maslow, Abraham H. Self-actualization and beyond. In Don Hamachek (ed.), Human Dynamics and Education. Boston: Allyn and Bacon, 1968.
- Matheny, Kenneth B. Role of the middle school in career development. American Vocational Journal, 44:18-21, 1969.
- May, Rollo, et al. Existential Psychology. New York: Random House, 1961.
- McNeil, Elton B. The Concept of Human Development. Belmont, California: Wadsworth, 1966.
- Miller, D. C., and Form, W. H. Vocational development stages. In D. Zytowski (ed.), Vocational Behavior. New York: Holt, Rinehart & Winston, 1968.
- Morrill, W. H., and Forrest, David J. Dimensions of counseling for career development. Personnel and Guidance Journal, 49:299-305, 1970.
- Nelson, Richard C. Knowledge and interests concerning sixteen occupations among elementary and secondary school students. Educational and Psychological Measurement, 23:741-754, 1963.
- Olson, LeVene A. Career education curriculum development. Huntington, West Virginia: Marshall University, 1972 (mimeo).
- Parnell, Dale. The Oregon way: a state plan for applying relevance to education. American Vocational Journal, 44:14-16, 1969.
- Peterson, Marla. Enrichment of teacher and counselor competencies in career education, K-6. ETC in Career Education. Charleston: Eastern Illinois University, February, 1973.
- Pratzner, Frank C. Development of the self-concept: a theoretical framework. Journal of Industrial Teacher Education, 7:31-37, 1969.
- Pressey, Sidney and Kuhlen, Raymond G. Psychological Development through the Life Span. New York: Harper and Bros., 1957.

- Rieder, Corinne. Forward Plan for Career Education Research and Development. Career Education Development Task Force. Washington: National Institute of Education, April, 1973 (mimeo).
- Schaefer, Carl J. Teaching the teachers: new dimensions for instructional roles. In R. Pucinski and S. P. Hirsch (eds.), The Courage to Change: New Directions for Career Education. Englewood Cliffs: Prentice-Hall, 1971.
- Silberman, Charles F. Crisis in the Classroom. New York: Random House, 1970.
- Simons, Joseph B. An existential view of vocational development. Personnel and Guidance Journal, 44:604-610, 1966.
- Super, D. A theory of vocational development. American Psychologist, 8:185-190, 1953.
- _____. Career Development: Self Concept Theory. New York: College Entrance Examination Board, 1963.
- _____. The individual and his environment. Paper presented at Ohio Conference on Guidelines for Implementing Career Development through Curriculum, K-12, Ohio Department of Education, Ohio State University, June 6, 1971.
- _____. The Psychology of Careers. New York: Harper, 1957.
- Swain, Emeliza. A training program for career exploration teachers. American Vocational Journal, 46:81-82, 1971.
- Swanson, Gordon and Jervis, Robert. Professional Development. Career Education Monograph #8. Raleigh: Center for Occupational Education, North Carolina State University, 1973.
- Sylwester, Robert. Piaget: his ideas are changing our schools. The Instructor, 78:59+, 1969.
- Tennyson, W. W. Career development curriculum. Paper presented at workshops in Cochise County, Arizona, January 26-27, 1971.
- _____. Career development: who's responsible? American Vocational Journal, 46:54, 56-58, 1971.
- Tennyson, W. W., and Ashcraft, Kenneth. Conference on Implementing Career Development Theory and Research through the Curriculum. Warrenton, Virginia: National Vocational Guidance Association, May, 1966.
- Tennyson, W. W., Klaurens, Mary and Hansen, Lorraine S. Career Development Curriculum. Minneapolis: Departments of Counseling and Student Personnel Psychology and Distributive Education, College of Education, University of Minnesota, 1970 (mimeo).

Tennyson, W. W., Klaurens, Mary and Hansen, Lorraine S. Career Education Resource Guides. Seven Learning Opportunities Packages. St. Paul: Personnel Service Section, Minnesota Department of Education, 1972.

The Center for Vocational and Technical Education. Developmental Program Goals for the Comprehensive Career Education Model. Preliminary edition. Columbus: The Ohio State University, August, 1972.

Thompson, Albert S. Counseling and the ages of man. Journal of Counseling Psychology, 11:221-229, 1964.

Tiedeman, David. Decision and vocational development: a paradigm and its implications. Personnel and Guidance Journal, 40:15-21, 1961.

_____. Predicament, problem and psychology: the case for paradox in life and counseling psychology. Journal of Counseling Psychology, 14:1-8, 1971.

Tiedeman, David and O'Hara, Robert. Career Development: Choice and Adjustment. New York: College Entrance Examination Board, 1963.

Tyler, Ralph W. Basic Principles of Curriculum and Instruction. Chicago: University of Chicago Press, 1950.

Vriend, John. Vocational maturity ratings of inner-city high school seniors. Journal of Counseling Psychology, 16:377-384, 1969.

Wernick, Walter. For Those Developing World of Work Resource Units for Elementary School Teachers. ABLE Model Program. DeKalb: Northern Illinois University, n.d.

Zaccaria, Joseph S. Some aspects of developmental guidance within an existential context. Personnel and Guidance Journal, 47:440-445, 1969.

Additional References and Resources

Benson, Arland. A Resource Guide for Career Development in the Junior High School. St. Paul: Division of Instruction, Pupil Personnel Services Section, Minnesota Department of Education, 1972.

_____. A Resource Guide for Career Development in the Senior High School. St. Paul: Division of Instruction, Pupil Personnel Services Section, Minnesota Department of Education, 1973.

Blocher, Donald H., and Rapoza, Rita S. A systematic eclectic model for counseling-consulting. Elementary School Guidance and Counseling, 7:106-112, 1973.

Borow, Henry (ed.). Career Guidance for a New Age. Boston: Houghton Mifflin, 1973.

Borow, Henry. Occupational roles and motives in children and youth. In L. W. Hoffman and M. L. Hoffman (eds.), Review of Child Development Research, vol. 7. New York: Russell Sage Foundation, 1966, pp. 373-422.

Career Education: A Handbook for Implementation. Baltimore: Maryland State Department of Education, February, 1972. Available from Government Printing Office, Catalog No. HW5.6/2:C18, \$0.55.

Chew, P. Why do we need to work? National Observer, July 17, 1971.

Drier, Harry N., Jr., et al. K-12 Guide for Integrating Career Development into Local Curriculum. Worthington, Ohio: Charles A. Jones Publishing Company, 1972a.

. Career Development Resources. A Guide to Audiovisual and Printed Materials for Grades K-12. Worthington, Ohio: Charles A. Jones Publishing Company, 1973.

Gibson, Robert. Career Development in the Elementary School. Columbus: Charles E. Merrill Publishing Company, 1972.

Gysbers, Norman; Miller Wilbur; and Moore, Earl. Developing Careers in the Elementary School. Columbus: Charles E. Merrill Publishing Company, 1972.

Hansen, Lorraine S. Career Guidance Practices in School and Community. Ann Arbor: ERIC Clearinghouse on Counseling and Personnel Services, 1970.

. Promoting Student Career Development through Utilization of Volunteers in a Career Resource Center. Project Report, Volunteers in Guidance, Marshall-University High School, University of Minnesota, August, 1971.

. A model for career development through curriculum. Personnel and Guidance Journal, 51:243-250, 1972.

Heck, William and Helling, Cliff. Career Related Math Units. Teachers edition. Minneapolis: Robbinsdale Independent School District 281. November, 1971.

Helling, Cliff. Vocational Exploration Inservice Institute. An inservice teacher education program designed to develop career development competencies. Minneapolis: Robbinsdale Independent School District 281, 1971.

- Herr, Edwin. Unifying an entire system of education around a career development theme. Paper presented at the National Conference on Exemplary Programs and Projects, 1968 Amendments to the Vocational Education Act, Atlanta, Georgia, March 12-14, 1969.
- Hoyt, Kenneth B., et al. Career Education and the Elementary School Teacher. Salt Lake City: Olympus Publishing Company, 1973.
- Jones, G. Brian, et al. Planning, Developing, and Field Testing Career Guidance Programs. Palo Alto: American Institutes for Research, 1972.
- Kosuth, Joan and Miltenberger, Jerry. Teaching for Career Decision-Making. Tustin, California: Diversified Counseling Services, 1972.
- Laramore, Darryl. Career education concept filters down. American Vocational Journal, 47:45-47, 78, 1972.
- Leonard, George E. Developmental Career Guidance in Action: Theory, Practice, Results, 1965-1970. Detroit: Wayne State University, 1973.
- McClure, Larry and Buan, Carolyn (eds.). Essays on Career Education. Portland, Oregon: Northwest Regional Educational Laboratory, 1973.
- Miller, Gordon P., and Gelatt, H. B. Deciding. College Board Review, 82:D1-D16, Winter, 1971-1972.
- Morgan, Robert L., (ed.), et al. Synopses of Selected Career Education Programs: A National Overview of Career Education. Raleigh: North Carolina State University, 1972.
- Nejedlo, Robert J. (ed.). A Guide to Career Guidance. DeKalb: Northern Illinois University, 1973.
- Neuwirth, Elizabeth M., et al. Career Development. Minneapolis: Robbinsdale Independent School District 281. St. Paul: Minnesota State Department of Education, Division of Vocational and Technical Education, 1971.
- Osipow, Samuel. What do we really know about career development? In Norman Gysbers and David Pritchard, Career Guidance, Counseling and Placement... Conference Proceedings, University of Missouri, Columbia, October 20-24, 1969.
- Super, D. E., and Overstreet, P. L. The Vocational Maturity of Ninth Grade Boys. New York: Teachers College (Columbia) Press, 1960.
- Super, D. E., et al. Floundering and Trial in the Post-High School Years. New York: Teachers College (Columbia) Press, 1970.

Taylor, J., Montague, E., and Michaels, E. An Occupational Clustering System and Curriculum Implications for the Comprehensive Career Education Model. Technical Report 72-1, Human Resources Research Organization, Alexandria, Virginia. Prepared for Center for Vocational and Technical Education. Columbus: The Ohio State University, January, 1972.

Tennyson, W. Wesley, et al. The Teacher's Role in Career Development. Washington: National Vocational Guidance Association, 1965.

Willingham, Warren W., et al. Career Guidance in Secondary Education. New York: College Entrance Examination Board, 1972.

Work in America. Report of a Special Task Force to the Secretary of Health, Education, and Welfare. Cambridge: MIT Press, 1972..

APPENDIX A

CRITERIA FOR A COMPREHENSIVE CAREER DEVELOPMENT PROGRAM

1. The program is designed to meet needs of all students (K-12).
2. It is sequential, building on vocational development tasks at each level.
3. Career development is implemented throughout the curriculum.
4. Behavioral goals and learning experiences are designed for each of the seven dimensions of career development.
5. Students are exposed to the full spectrum of the world of work.
6. Provision is made for directed occupational experiences in the real world of work, along with simulated and informational experiences to permit focus on career clusters.
7. Leadership is identified and coordination of teacher efforts provided.
8. Provision is made for inservice education designed to orient teachers to career development and to the business and industrial world.

APPENDIX B

WHAT CAREER DEVELOPMENT PROGRAM (K-12) WILL ACCOMPLISH

1. Promote self awareness and help students determine meaning of their lives.
2. Encourage in students a planfulness with respect to educational and vocational endeavors.
3. Promote positive attitudes toward work and develop habits of responsibility.
4. Overcome industrial ignorance through systematic exposures to workers and work settings.
5. Make education more relevant by bridging school and community.
6. Integrate the educational effort of staff members around a common purpose.

APPENDIX C

SELECTED MODELS IN CAREER EDUCATION

Model	Chief Investigator or Author	Address
Conceptual Models		
1) American Institutes for Research <u>Planning, Developing, and Field Testing Career Guidance Programs</u>	G. Brian Jones, et al.	P.O. Box 1113 Palo Alto, California 94302
2) Comprehensive Career Education Model <u>Developmental Program Goals</u>	Staff, The Center for Vocational and Technical Education	The Ohio State University Columbus, Ohio 43210
3) California Statewide Career Development <u>Model, K-Adult</u>	J. E. Cunha, D. Laramore, et al.	California State Department of Education Sacramento, California 93
4) ERIC-CAPS Career Guidance Programs Goals <u>(K-Post High)</u>	Juliette Miller, et al.	CAPS University of Michigan 600 Church Street Ann Arbor, Michigan
5) University of Minnesota <u>Career Development Curriculum (CDC)</u>	Wesley Tennyson, Mary Klaurens, L. Sunny Hansen	139 Burton Hall University of Minnesota Minneapolis, Minn. 55455
Operational Models		
K-12		
1) Developmental Career Guidance in Action	George Leonard	School of Education Wayne State University Detroit, Michigan
2) American Institutes for Research <u>Project PLAN</u>	John Flanagan, Jack Hamilton	P.O. Box 1113 Palo Alto, California 94302

Model	Chief Investigator or Author	Address
Operational Models (continued)		
Elementary		
3) University of Northern Illinois Project ABLE	Walter Wernick	University of Northern Ill. DeKalb, Illinois
4) Roseville, Minnesota <u>Roseville Career Development Project, K-6</u>	Charles Harwood, Vern Vick	District Office Roseville Schools Roseville, Minnesota
5) Southern Illinois <u>Career Development for Children</u>	Larry Bailey	Southern Ill. University Carbondale, Illinois
Junior High		
6) College Entrance Examination Board <u>Deciding</u>	Harry Gelatt, Barbara Varenhorst, Richard Carey	Palo Alto School District Palo Alto, California
7) Hosterman Junior High <u>Interdisciplinary Model</u>	Betty Neuwirth, et al.	Hosterman Junior High School School District 281 Robbinsdale, Minnesota
Senior High		
8) Robbinsdale Senior High School <u>Career Education Program</u>	Cliff Helling	District Office District 281 Robbinsdale, Minnesota
9) <u>Los Angeles CCEM Guidance Component</u>	Barry Mostovoy	Los Angeles Schools, Los Angeles, California
10) Villa Park, Illinois <u>Computerized Vocational Information System</u>	Joann Harris	Willowbrook High School Villa Park, Illinois

Model	Chief Investigator or Author	Address
Operational Models (continued)		
Post-High		
11) Augsburg College Career Development Program	Rick Thoni, Pat Olson	Student Development Center Augsburg College Minneapolis, Minnesota
12) ETS System of Interactive Guidance	Martin Katz, et al.	Educational Testing Service Princeton, New Jersey

APPENDIX D

PARTIAL LIST OF CAREER EDUCATION RESOURCE PERSONS IN MINNESOTA

A number of school systems and communities are engaged in trying to identify and classify community resources available for a variety of purposes--people willing to talk with students about their job or special interest on a one-to-one basis; those willing to talk to small groups; those willing to talk to large groups; those willing to be interviewed personally or by tele-lecture on their life style; those willing to have students visit their work site; those willing to use students as paid workers or volunteers, etc. There are also a number of teacher and counselor educators, teachers, counselors, vocational coordinators and others involved in career education programs around the state who might be a resource to the teacher educator or prospective teacher. Some of these and their location are listed below. These individuals might be contacted as possible resource persons or for possible observations of operational programs and/or materials in career education. It should be pointed out that this list is not complete. A more complete list is available from Mr. Len Kodet, Vocational Division, Minnesota Department of Education, Capital Square Building, St. Paul, Minnesota, 55101.

Project TACO - Osseo Schools

Mr. Robert Olson - Personnel Director
 Mrs. Gay Ludvig - Counselor
 Mr. Russ Hirsch - Administrator
 Mr. Bill Shragg - Audiovisual Director

Robbinsdale School District #281

Dr. Cliff Helling - Vocational Director
 Mr. Carroll Vomhof - Community Affairs
 Coordinator
 Dr. William Heck - Mathematics Consultant
 Miss Betty Neuwirth - Counselor
 Barbara Clark - Environmental Careers Project
 Mr. Don Johansen, Environmental Center

Roseville Career Development
Project

Mr. Vern Vick - Project Director,
 District Office
 Mr. Ted Molitor - Science Teacher, Ramsey
 Senior High School
 Mrs. Elaine Hummel - Elementary Teacher
 Mrs. Suzanne Laurich - Elementary Teacher,
 North Owasso Heights
 Mr. Greg Logacz - Elementary Teacher,
 North Owasso Heights
 Judy Larson, English Teacher
 Arland Benson, Evaluator

Minneapolis Public Schools

Dr. Mabel Melby, Consultant, Elementary Education
 Mrs. Christine Carr - Elementary Counselor
 Willard School
 Mrs. Rae Silman - Counselor, Marshall-U High
 Mrs. Peggy Hausman - Volunteer, Career Resource Center
 Mr. Ken Rustad - Director of Student Services
 Mrs. Jean Stafford - Aide, Career Resource Center

Cottage Grove Schools

Mr. Rod Hale - Vocational Director
 Miss Linda Nord - Elementary Teacher
 Mr. Bill Innis - Elementary Principal

St. Paul Public Schools

Dr. Harold Lehto, Director, Career Education
 Dr. Al Hanor, Secondary Consultant, Career Education
 Mr. Roger Montgomery, Elementary Consultant, Career Education
 Mrs. Juanita Morgan, Elementary Teacher, Roosevelt
 Mrs. Martha Zachary - Elementary Counselor
 Mr. Bill Swope, Learning Centers
 Mr. Steve Sweetland, Career Study Center
 Mrs. Marlene Rynard, Counselor, Mechanic Arts

Owatonna Career Development Project

Mr. Dean Sanderson, Elementary Principal
 Mr. Don Barber, Project Director
 Mr. Pete Conner, Elementary Teacher

Red Wing Career Development Project

Mr. Peter Martens - Principal
 Mrs. LaVern Grassmoen - Elementary Director
 Mrs. Pat Eng - 6th Grade Teacher

Little Falls High School

Mr. Joe Freeman - Vocational Director

Rochester Vocational Area School

Dr. Charles Harwood - Director

North St. Paul

Mr. George Von Drashek - Career Education Director

Stillwater Public Schools

Mr. William Warner - Vocational Director

University Personnel, College of Education, Minneapolis

Dr. Henry Borow - General College
 Dr. Harlan Hansen - Elementary Education
 Dr. L. Sunny Hansen - Counseling and Student Personnel Psychology

	Dr. Mary Klaurens - Distributive Education
	Dr. Brandon Smith - Research Coordination Unit
	Dr. Gordon Swanson - Agricultural Education
	Dr. W. Wesley Tennyson - Counseling and Student Personnel Psychology
	Mr. Michael Wollman - General College
Duluth - UMD	Dr. Armas Tamminen - Counselor Education
	Mr. Ken Held - Mobile Career Education Unit
Anoka	Miss Gen Olson - Director, Career Education
Winona	Dr. Don Crawford - Vice President, Academic Affairs, St. Teresa's College
Mankato State	Dr. Griffith
	Dr. Handel
	Joe Hogan - Counselor Education
Augsburg College	Mr. Rick Thoni - Student Development Center
	Ms. Pat Olson - Student Development Center
Minnesota Department of Education	Dr. Gerald Kleve - Director of Elementary Education
	Mr. Reynold Erickson
	Mr. Jules Kerlan - Pupil Personnel Services Division
	Mrs. Jane Preston - Career Education of Women, Vocational Division
Career Development through English	Mrs. Phyllis Kragseth - Supervisor, English Education, College of Education, Burton Hall
St. Cloud State	Al Krueger - Counselor Education

APPENDIX E

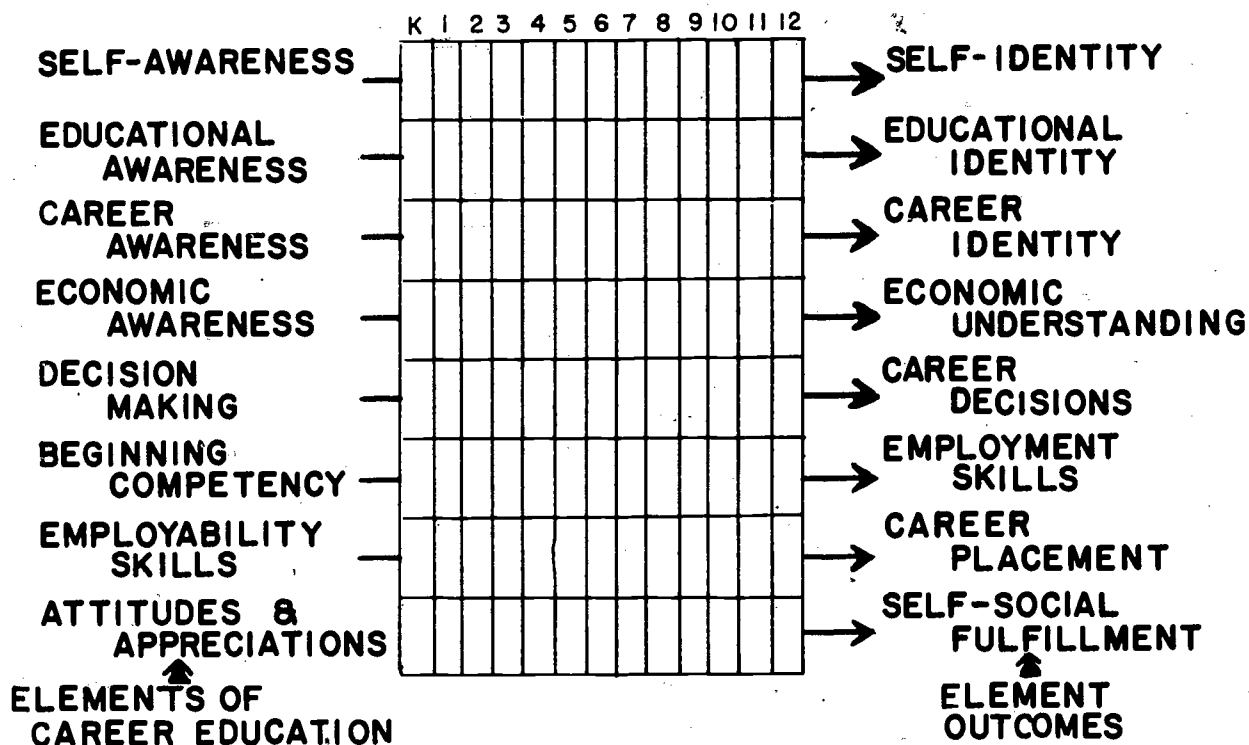
THE COMPREHENSIVE CAREER EDUCATION MODEL (CCEM)
U. S. Office of Education

Because so much publicity and support is being given to the U. S. Office of Education Comprehensive Career Education Model (CCEM), a brief description is included here. The model has as its base a continuous exposure to the world of work through curriculum, K-adult. It focuses on behavioral objectives, K-3, 4-6, 7-9, and 10-12; suggests curriculum be restructured around career clusters and integrated through subjects; and that educational systems be accountable for 100 per cent-placement of all students in jobs or further education.

The USOE has identified six pilot schools for the school-based model: Hackensack, New Jersey; Mesa, Arizona; Los Angeles, California; Jefferson County, Colorado; Atlanta, Georgia; and Pontiac, Michigan. The CCEM specifies major teacher participation in reorganizing curriculum around a career development theme. It presents a series of developmental program goals arranged around eight elements (self-awareness, educational awareness, career awareness, economic awareness, decision-making, beginning competency, employability skills, and attitudes and appreciations). These are translated into a K-12 matrix of 32 themes and outcome statements arranged by grade level. While the developmental model specifies student outcomes rather than teacher performance, it is obvious that since this is a curriculum model, and it is primarily teachers who implement curriculum, the developmental program goals have strong implications for teacher responsibility and competency. These responsibilities are made more explicit in a document on inservice preparation in a section called "Orienting Installation Teachers to Their Role" (Drier, 1972b). The specific teacher responsibilities identified include attitudinal goals relating to teachers' interpersonal working relationships and attitudes toward career education; methodological goals including utilization of new teachers' guides, units, and resources; and integrational goals such as seeing how his or her subject relates to the existing curriculum, to the student's career development process and to the total career education program.

The CCEM matrix is presented on the following page, followed by the 15 occupational clusters around which curriculum is to be restructured. For future directions, see the Forward Plan of the Career Education Task Force in the National Institute of Education (1973). The Ohio Center for Vocational-Technical Education is the prime contractor for the CCEM school-based model. In addition, there is a home-based model and an industry-based model. For further detail see Keith Goldhammer and Robert Taylor, Career Education: Perspective and Promise, Columbus: Charles Merrill Company, 1972.

CCEM Matrix



15 Occupational Clusters of CCEM

1. Business and office occupations
2. Marketing and distribution occupations
3. Communications and media occupations
4. Construction occupations
5. Manufacturing occupations
6. Transportation occupations
7. Agri-business and natural resources occupations
8. Marine science occupations
9. Environmental control occupations
10. Public service occupations
11. Health occupations
12. Hospitality and recreation occupations
13. Personal service occupations
14. Fine arts and humanities occupations
15. Consumer and homemaking related occupations

APPENDIX F

MEANINGS OF WORK

1. Biological survival (food, clothing, shelter, protection)
2. Sacred duty or moral obligation
3. Improvement of socioeconomic status
4. Self-esteem
5. Earning and maintaining a preferred life style
6. Earning leisure time
7. Altruism (desire to contribute to society's welfare)
8. Self-fulfillment (self-actualization)
9. Providing a sense of purpose and usefulness to daily life
10. Means to affluent consumption
11. Power
12. Means to changing society
13. Other

APPENDIX G

INFORMATION FOR BUSINESSES AND INDUSTRIES
PROVIDING OCCUPATIONAL EXPERIENCE FOR TEACHERS

As schools attempt to provide more vocational guidance and "orientation to the world of work," occupational exploration experiences will serve the needs of educational personnel who want to develop career education programs. Students will spend one or two half-days in an industry followed by seminars on their experience.

Several companies have been contacted and have agreed to provide an industrial experience for educators. This field experience is an important part of a student's orientation to career education. If for any reason a student has to miss a scheduled visit, he will communicate this information in advance to the company's contact person or to the instructor. We see participation in this field experience as a way of building closer relationships between the business and educational community.

Each inservice teacher or prospective teacher may be assigned to at least two employment situations which are matched to the perceived instructional needs and interests of the student. They may be in each work setting from 3 to 7 hours. Teams of 3 to 4 students may be assigned to each firm or agency for one or two afternoons.

The planned occupational experience will consist of the following:

1. Interviews with workers and supervisors
 - a. Duties and requirements of jobs
 - b. Problems of adjustment
 - c. Opportunities for advancement
 - d. Satisfactions and rewards
 - e. Information and skills needed to perform tasks
 - f. Policies and practices
2. Observations and analysis
 - a. Critical incidents
 - b. Equipment and materials
 - c. Products and services
 - d. Attitudes and characteristics of satisfied and satisfactory workers
3. Job training and performance when possible and warranted
 - a. Orientation of new employees
 - b. Sales meetings
 - c. Product information meetings
 - d. Operation of equipment
 - e. Assisting experienced employee

The seminar sessions will include discussions on:

1. What to observe and investigate in work environment and occupations
2. Methods of gathering information about occupations
3. Problems of workers in adjusting to jobs (theory of work adjustment, etc.)
4. Use of critical incidents in instruction
5. Relating classroom instruction to occupations and the world of work
6. Psycho-social dimensions of work
7. Projects and other simulated learning experiences related to the work
8. Problems of supervision
9. Utilizing the community for career exploration

APPENDIX H

A PLAN FOR CAREER EDUCATION

- I. Mission or Purpose
Statement of general purpose of a career education program in your school.
- II. Program Objectives
Ten to twenty objectives of the program (such as the seven dimensions of career development) plus any others (such as "to stimulate student interest in school").
- III. Involvement of Personnel
Administrator responsibilities
Counselor responsibilities
Teacher responsibilities
Task forces or committees
Leadership or coordination
Outside advisory help
Parent and community involvement
Rewards and recognition for participation
- IV. Delivery System
How integrated - what subjects or units
Use of career clusters?
Central thrust of program (hands on, work experiences, simulations, etc.)
Articulation
- V. Resource Materials
Library, audio-visual, etc.
Classroom speakers
Equipment available or needed
Industry contacts
- VI. Characteristics of the Program
Kinds of activities, general guidelines, etc.
Methods
Cost arrangements
- VII. Evaluation
Describe how you will evaluate - teacher log or what forms
Pre and post tests
Communication and feedback
- VIII. Phasing
Timetable, schedule or flowchart
- IX. Appendix - Forms or Guides to the teacher
Examples: What to do on a field trip
Questions for a resource visitor
Discussion questions

APPENDIX I

GUIDELINES FOR SYSTEMS CHANGE IN CAREER EDUCATION

1 Systems Guidelines	2 Cognitive Evaluation (Task)	3 Affective Change Strategies (Maintenance)
Build a relationship with the system (internal or external consultant); analyze your position in the system	Analyze the population What is target population intended? For whom is program intended? (students, parents, teachers) What are their needs?	Be open, competent, responsible and available Build a support group of people who --are trusted, open, competent; --have some power or status within the system --are risk-takers or innovators --communicate well with others
Diagnose the system-- Pressessment (needs or cause of problem; why system needs changing)	Analyze the setting In what kind of setting or environment is the program to operate	Choose a strategy for change which is reasonable, feasible (not too big or a change too fast)
Provide a strategy (potential solution to meet need) Have a specific plan	Analyze the community What are the relevant needs and characteristics of the larger community in which the setting is located? (parent values, business-industry opportunities, etc) Other agencies involved?	Choose an innovation that will not be too threatening to too many
Analyze resources--existing and needed Human and non-human resources Financial, physical, other		Anticipate resistance and the forms it will take (apathy, hostility)
Implement the strategy	Analyze the objectives What are the objectives of your intervention or program, stated specifically and behaviorally	Choose a strategy that has a good chance of succeeding--success breeds success
Assess the effectiveness of the strategy How do you account for the change? How do you document the change?	Identify the methods What methods, media and materials will you use for developing and implementing your program?	Build a communication system in a variety of ways--person-to-person, coffee chats, feedback mechanisms
Provide for feedback into decision-making, improvement, and redesign of plan for innovation		Seek both internal and external support (administrators, parents, students, faculty council) and obtain public commitment
Provide for dissemination of results		

Guidelines for Systems Change in Career Education (continued)

1 Systems Guidelines

2 Cognitive Evaluation (Task)

3 Affective Change Strategies (Maintenance)

Analyze the outcome

To what extent has each objective been achieved?
(process)

To what extent have your overall performance objectives been achieved?
(product)

Have alternative or back-up strategies and be prepared to negotiate

Provide incentives and rewards for participation

Constantly evaluate the process

Adapted from:

Innovations in Education,
Ronald Havelock, Institute
for Research in Utilization of
Scientific Knowledge,
University of Michigan, 1970.

"An Evaluation Model for
Guidance," Ed Dworkin and
Garry Walz, University of
Michigan, 1971.

"Rules for an Internal Consultant,"
A. Anderson, University of Minnesota,
(mimeo).

SH:6-18-73